Storm Water Pollution Prevention Plan

Residences at Morning Vista
GEI 20124
Oro Valley, Arizona

2501679

PLANS REVIEWED AND ACCEPTED FOR CODE COMPLIANCE

Stormwater: miortiz 11/06/2025

The issuance of a permit shall not be construed to be a permit or approval of any violation of the codes or ordinances of the Town of Oro Valley

Prepared for:

DSW Commercial Real Estate

1795 E. Skyline Dr., Suite 193

Tucson, AZ 85718

520-297-8929

Prepared by:

GRENIER ENGINEERING, INC.
Structural and Civil Engineering Consultants
6300 E. El Dorado Plaza, Ste. A120, Tucson, AZ 85715
Phone: 520.326-7082 • Fax: 520.326.7508

Registered Professional Engineer (Civil)
CERTIFICATE NO.
53209
JASON RAY
MORSE
DATE SIGNED
ARIZONA U.S.A.

NOI # 112688

SWPPP AMENDMENT LOG

Residences at Morning Vista

GEI 20124

Amendment No.	Date	Brief Description of the Amendment	Prepared By

TABLE OF CONTE NTS

1. INTRODUCTION

This Storm Water Pollution Prevention Plan (SWPPP) is prepared in accordance with the current US Environmental Protection Agency (EPA) Statutes and Regulations ("Storm Water Management for Construction Activities" Guidance Manual, dated September 1992). The primary purpose of this SWPPP and the controls outlined herein is to prevent pollutants derived from project activities from entering Waters of the United States.

Arizona Department of Environmental Quality (ADEQ) is authorized to regulate surface water discharges from all facilities and municipalities within the State of Arizona, in accordance with the Federal Clean Water Act (CWA). A copy of the AZPDES General Permit, effective July 1, 2020, is included in the SWPPP.

This Storm Water Pollution Prevention Plan must be amended to reflect any change (applicable to protecting surface water resources) in sediment and erosion site plans or permits, or storm water management site plans or permits, approved by state or local officials for which the permitee receives such written notice of a change. The permitee shall provide a recertification in the SWPPP that the SWPPP has been modified to address such changes.

Certification statements are attached to the SWPPP indicating that the Owner and or Contractor have examined and are familiar with the information presented in the SWPPP and that the SWPPP is in compliance with the AZPDES General Permit and any other city, county, state or federal permits regulating erosion, sediment, and stormwater controls, such as, but not limited to, the US Army Corps of Engineers 404 Permit and the ADEQ 401 Permit. The certification forms are provided in this report and should be signed and dated by the responsible party.

The Notice of Intent (NOI) form has been signed by a representative of the client.

This Storm Water Pollution Prevention Plan (SWPPP) is prepared in accordance with the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit (AZCGP) administered by the Arizona Department of Environmental Quality (ADEQ) and the Arizona Department of Transportation (ADOT) Statewide Storm Water Management Plan (SSWMP). This SWPPP provides information about the sources of sediment and other pollutants that may affect the quality of storm water discharge from the construction site, and the types of Best Management Practices (BMPs) to be implemented to control storm water quality and reduce the amount of contaminants entering receiving waters during construction activities. The BMPs and control measures recommended in this SWPPP are in accordance with recommended practices in the ADOT *Erosion and Pollution Control Manual* and other ADOT guidance, as applicable. The location of each element in the ADEQ Construction SWPPP Checklist within this SWPPP is contained in Appendix A. In general, this SWPPP follows the ADEQ checklist format but may vary to correlate more closely with the ADOT *Erosion and Pollution Control Manual* and project specifications.

1.1 PROJECT OPERATORS

The general contractor (prime) and all subcontractors will be responsible for project and SWPPP implementation. The owner will be responsible for project oversight and supervision. The following operators, their addresses, contact persons, phone numbers, and their areas of operational control are indicated below.

Owner
DSW Commercial Real Estate
1795 E. Skyline Dr., Suite 193
Tucson, AZ 85718
520-297-8929

Area of Responsibility
Project oversight

Prime Contractor Name:
JEM Development, LLC.

General project management, responsible for implementing, inspecting, and maintaining the SWPPP and controls

Phone: 520-548-4321
Contact Person: Christopher Itule

Subcontractor Name (optional):	(Area of expertise)
Phone:	
Contact Person:	

The Contractor's Erosion Control Coordinator (ECC) will be assigned to this project by the contractor.

The qualified party to complete site inspections is as follows:
Don Phillips – Site Supervisor
520-990-5301

In case of an emergency contact 520-297-8929 (Available 24/7)

The contractor and contractor's ECC shall review the preliminary project information (including contract documents and erosion control features and phasing) and evaluate all SWPPP requirements for adequacy in addressing pollution prevention during construction. The ECC shall have primary responsibility and significant authority for the implementation, maintenance, and amendments to the approved SWPPP in accordance with AZPDES. The ECC will, at all times, be aware of the contractor's work activities, schedule, and effect of the work on the environment, and will, at any time, be accessible to direct the contractor's personnel to replace or repair erosion control measures as necessary. Should the ECC not be present at the project site on a full-time basis, the contractor will establish procedures to ensure that the ECC is promptly notified of any damage or displacement of the required erosion control measures, whether from construction, vandalism, or other causes. In addition, the contractor will provide the Engineer of Record with a phone number through which the ECC can be contacted at any time, 24 hours a day, seven days a week, including holidays. The ECC must be present at the job site within 24 hours of such call being placed. The contractor will also provide documentation indicating the types of relevant experience and the number of years of each type of experience to be considered for approval of the ECC's qualifications by the Engineer of Record.

1.2 INCORPORATED REFERENCES

The following documents are made a part of this SWPPP by reference:

- Project plans, specifications, and contract documents and any addenda for The Residences At Morning Vista prepared by Grenier Engineering, Inc.

- *Arizona Pollutant Discharge Elimination System General Permit for Discharge From Construction Activities to Waters of the United States.* ADEQ. July 1, 2020.
- *Erosion and Pollution Control Manual.* ADOT. February 2005.
- *NPDES Permit for Storm Water Discharges from the Municipal Separate Storm Sewer System (MS4) Operated by Arizona Department of Transportation (ADOT) NPDES Permit No. AZS00018*, U.S. Environmental Protection Agency. September 30, 1999.
- *Statewide Storm Water Management Plan.* ADOT. March 1, 2005.
- *Storm Water Monitoring Guidance Manual for Construction Activities.* ADOT. February 1, 2005.
- *Geotechnical Engineering Report, Morning Vista Townhomes, prepared by ConformaTECH, dated December 14th, 2022*

2. PROJECT INFORMATION

2.1 PROJECT DESCRIPTION

Site Location:

The project site is located within Section 24, Township 11 South, Range 13 East, Gila and Salt River Meridian, Pima County, Arizona. More specifically, the project site is located east of the intersection of E. Rancho Vistoso Blvd. and W. Morning Vista Dr, Oro Valley, AZ 85755. APN: 219-20-001C.

Project Description:

This development consists of constructing a new residential townhome subdivision, associated parking, sidewalks and utilities. The project site has an area of about 3.5 acres and a disturbed area of 3.27 acres.

The grading scheme for this project has been designed to generally match that of the existing drainage conditions.

Receiving Waters and Unique Site Features

The site is located within an existing partially developed planned residential area development. This particular parcel is undeveloped property generally sloping northeast at slopes of approximately 15%. Small portions along Morning Vista drains towards the street. Most Stormwater runoff drains into an existing unnamed wash located at the northeastern portion of the site. Stormwater run-off subsequently conveys northeasterly via this unnamed wash and discharges into the Honeybee Wash, then into Big Wash then into Canyon Del Oro Wash before eventually discharging into the Santa Cruz River. The latitude and longitude of the construction site at the point nearest the receiving water are provided below.

Latitude: 32 degrees 227 minutes 24.05 seconds

Longitude: -110 degrees 58 minutes 13.12 seconds

Wetlands do not exist on the project site.

Rainy Season July 1 through September 30 and perhaps December 1 through February 28
Non-Rainy Season October 1 through June 30

2.1.2 Sequence of Activities

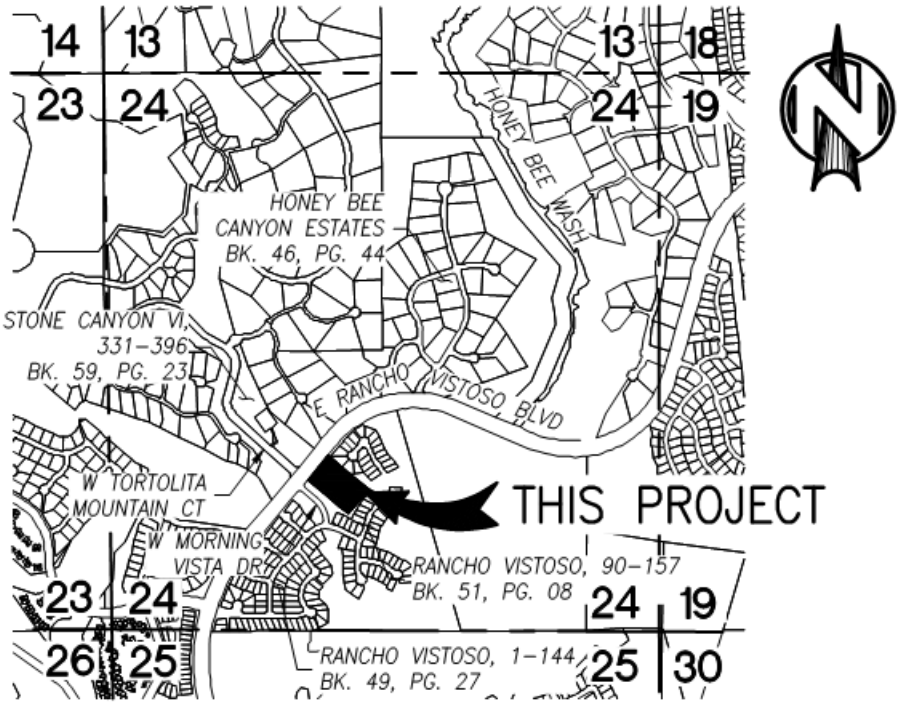
The intended sequence of site activity is as follows: Determine the disturbance limits, install the proposed BMP's within these limits prior to clearing and rough grading, perimeter SWPPP BMPs will be placed prior to clearing and rough grading, the site will be cleared and graded, utilities, and drainage channels will be constructed and BMPs placed for the duration of construction. Construction will follow the project construction schedule provided by the contractor. Permanent BMPs will be placed and inspected. A NOT will be filed and the project will be closed.

2.1.3 Total Site Area and Total Disturbed Area

Total Area of the Project Site: 3.51 acres

Total Disturbed Area: 3.27 acres

Figure 1
Not to scale



LOCATION MAP

SCALE: 3" = 1 MILE
A PORTION OF THE SW QTR. SECTION 24, T-11-S, R-13-E G&SRM, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA 85755

2.1.4 Runoff Coefficients, Soil Data, and Discharge Quality

Pre construction Runoff Coefficient: 0.52

Post construction Runoff Coefficient: 0.75

Soils Data
Soils data is obtained from the project geotechnical reports, *Geotechnical Engineering Report, Morning Vista Townhomes prepared by ConformaTECH, dated December 14th, 2022.* The existing soils are generally clayey and silty sand with varying amounts of gravel content.

Pre-Existing Discharges
Storm water from the project site flows to northeasterly into northeastern unnamed wash.

2.2 SITE MAP

Site map(s) and plans containing the following information for this project are located in Appendix A.

2.3 AUTHORIZED DISCHARGES

2.3.1 Allowable Storm Water Discharges

The following is a list of the sources of allowable storm water discharges from project activities. Storm water from allowable construction activities may be discharged off-site provided that appropriate control measures are implemented. Locations of allowable storm water discharges may be found on the project site map and plans (Appendix A). Required control practices for allowable discharges are included in Section 3. The following construction activities may be sources of allowable storm water discharges:

Clearing and grubbing operations.
Grading operations.
Use of unpaved access and haul roads.
Soil import operations.
Material stockpiling.
Utility excavation operations.
Landscaping operations.
Storm drain and culvert installation, channel excavation.

Storm water from allowable construction support activities may be discharged off-site provided that appropriate control measures are implemented. Control measures for support activities are described in Section 3.2. The following is a list of allowable construction support activities for this project:

Equipment staging and maintenance yards
Material storage yards
Excavated materials disposal and borrow areas

2.3.2 Allowable Non–Storm Water Discharges

The following is a list of the sources of allowable non–storm water discharges from project activities. Locations of allowable non–storm water discharges may be found on the project site map and plans (Appendix A). Required control practices for allowable non–storm water discharges are included in Section 3.

The following construction activities may be sources of allowable non–storm water discharges.

Pre-wetting of soils (potable water).

Compaction and dust control (potable water).

Potable water well and line flushing (Note: See requirement for negative declaration on use of super chlorinated waters.

2.4 SOURCES OF POLLUTANTS

Construction materials have the potential to contribute pollutants to storm water. Construction materials will be stored on the project site at the locations indicated on the project site map and plans in Appendix A. The following materials will be stored and subject to control practices discussed in Section 3:

Raw landscaping materials and wastes (topsoil, plant materials, herbicides, pesticides, fertilizers, and mulch).

Landscape irrigation provided reclaimed water is not used.

BMP materials (straw).

Treated lumber (materials and wastes).

Concrete waste (including concrete wash-out).

Masonry block rubble.

General litter and trash.

Miscellaneous demolition debris.

Sanitary and septic wastes.

The following construction activities have the potential to contribute pollutants to storm water. These activities will take place on the project site at the locations indicated on the project site map and plans in Appendix A. These activities will be subject to control practices discussed in Section 3. A list of potential pollutants is included for each activity.

Sources of non–storm water pollutants include but are not limited to:

Equipment staging and maintenance yards

Material storage yards

Excavated materials disposal and borrow areas

Concrete sawing, grinding, and paving operations

Concrete, mortar mix, and curing compounds associated with concrete operations, flatwork, etc.

Steel-wheel roller water discharges

Application of water mixed with wood fiber mulch and tackifier and soil amendments associated with seeding or temporary soil stabilization processes

3.1.1 STRUCTURAL CONTROLS

Storm water controls consist of structural and nonstructural control practices. Structural controls for this project were preliminarily selected during the design process in accordance with standard ADOT practices contained in the ADOT *Erosion and Pollution Control Manual,* ADOT 104.09 Stored Specifications, ADOT standard drawings, and any applicable local jurisdictional requirements. The Engineer has reviewed the BMP design details and has made any adjustments necessary prior to inclusion within this SWPPP. Structural controls will be installed in accordance with manufacturer's specifications, good engineering practices, the ADOT *Erosion and Pollution Control Manual,* and the included BMPs. Structural controls include soil stabilization, sediment control, and non– storm water discharge control BMPs.

The following BMPs are proposed for this project.

3.1.2 Soil Stabilization

Soil stabilization consists of source control measures designed to prevent soil particles from detaching and being transported in storm water. Soil stabilization includes temporary and permanent stabilization practices. Locations of soil stabilization practices are included in the plan sheets in Appendix A. The following temporary and permanent soil stabilization practices will be followed on this project where applicable. Details may be found in Appendix B.

BMP Description
EC-1 Scheduling

3.1.3 Construction Schedule

Construction scheduled to commence 10/1/2025 through 10/1/2027.

3.1.4 Scheduling and Documentation of Stabilization Efforts

Clearing and grubbing activity will be scheduled throughout the project to allow existing vegetation to remain in place as long as possible. Temporary sediment control structures must be in place prior to any earth moving activities. Installation of permanent erosion control measures will be given priority over reliance on temporary measures. Permanent erosion control measures and drainage structures will be installed as soon as possible in the construction sequencing of the project, preferably concurrent with construction of the related subarea or drainage device. Records documenting when major grading activities occur, when construction activities cease (temporarily or permanently), and when stabilization is initiated and completed will be kept for this project using the form in Appendix C.

3.1.5 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance soil stabilization measures and reduce sediment discharges from construction sites. Sediment control measures are designed to intercept and settle out soil particles that have become detached and transported by the force of water. The onsite sediment basins will be converted into permanent detention/retention basins. The basin must be maintained as described in the BMP detail sheets in order to prevent sediment accumulation. Sediment basins must be retested for percolation post construction. The following measures will be implemented where applicable, to the maximum extent practicable to control sediment in disturbed areas, with special attention to areas with a high potential for significant erosion (details can be found in Appendix B):

BMP
SE-7 Street Sweeping and Vacuuming

Other Controls

Any accumulation of off-site sediment will be removed immediately following discovery of off-site deposition. Any tracking of sediment will be removed from paved roadways within 24 hours. Other controls will be used to minimize the generation of dust and sediment from construction site roadways. The following BMPs will be implemented on construction site roadways. Installation and maintenance details can be found in Appendix B.

BMP Description
WE-1 Wind Erosion Control
TC-1 Stabilized Construction Entrance/Exit

3.2 NON-STORM WATER MANAGEMENT CONTROLS

Potential pollutants for this construction project are listed in Sections 2.4. All non-storm water will be eliminated or reduced to the extent feasible. Site locations for support activity areas may be found in Appendix A. The following BMPs will be used where applicable, for non-storm water discharges. Vehicles and equipment will receive major service off site. On site service will be limited to routine service utilizing self-contained service trucks which carry all fuels, lubricants and wastes onboard. In the event that emergency equipment service needs to be conducted on site the Stormwater Pollution Prevention Plan will need to be modified to identify a containment area.

BMP Description
NS-3 Paving and Grinding Operations
NS-7 Potable Water/Irrigation
NS-9 Vehicle and Equipment Fueling

3.3 NONSTRUCTURAL BMPS

Nonstructural BMPs include measures to minimize the potential for pollutants to enter storm water discharges. These measures include good housekeeping practices, a spill control and response plan, employee training, maintenance of controls, and routine facility inspections as described below.

3.3.1 Good Housekeeping

Good housekeeping measures ensure a clean and orderly site to reduce the possibility of contaminants being introduced into the work area. Soil stockpiles shall be stabilized when not being actively worked (this includes weekends, evenings, and other downtimes). The good housekeeping measures for this project will include the following practices.

BMP Description
WM-1 Material and Delivery Storage
WM-2 Material Use
WM-3 Stockpile Management
WM-4 Spill Prevention and Control
WM-8 Concrete Waste Management

3.3.2 Spill Control and Response

Procedures and practices implemented to prevent and control spills in a manner that minimizes discharges of spilled materials to the drainage system or watercourse are required for all construction activities. Spill control procedures are implemented anytime chemicals and/or hazardous substances are stored. The contractor must identify

appropriate practices for the specific materials used or stored on-site. Procedures for this site should include but are not limited to the following:

- Procedures for storage and use that will prevent spills.
- Procedures for spill cleanup including minor and significant/hazardous spills.
- Procedures for the containment of spills.

Weekly verification that spill control cleanup materials are located near material storage, unloading, and use areas will be performed. To prevent spills, regular preventive maintenance on tanks and fuel lines is performed. Update spill prevention and control plan if changes occur in the types of chemicals on-site.

All spills will be reported immediately to Tucson Fire (520-791-4512), the City of Tucson (520-791-3175), ECC, and within 24 hours to ADEQ (602-771-2330), and cleaned up promptly. The source of the spill will be immediately located and stopped as soon as it is safe to do so. The spilled substance will be contained immediately or as soon as it is safe to do so to minimize the impact of the spill. Contaminated materials, including soil, spilled materials, protective equipment, absorbent materials, and cleanup supplies will be properly handled and disposed of. Granular absorbent will be applied to any gasoline spills and subsequently disposed of in the waste storage area.

A Spill Report will be completed within 5 calendar days after discovery of the spill and submitted to the City of Tucson. The report shall document the type, volume, cause of the discharge, corrective actions taken, and measures to prevent future occurrences. A significant spill is a release of a hazardous substance equal to or greater than quantities reportable under Clean Water Act Section 311 and Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The contractor will be responsible for reporting Clean Water Act and CERCLA-significant spills of toxic or hazardous regulated material to the owner and the appropriate government agency.

3.3.3 Training

Effective management of storm water pollution requires contractors and employees to be alert to those conditions that may cause pollutants to enter storm water. Proper design, use, and maintenance of BMPs by all contractors and employees are essential to the SWPPP. The contractor, the ECC, and the Operator are responsible for ensuring that all staff responsible for SWPPP implementation understands the components of the SWPPP, how it will be implemented, and their individual role in contributing to the effectiveness of the SWPPP. Training will address control measures identified in this plan, good housekeeping, materials management, spill response, maintenance of controls, and inspections. Training can be formal or informal. Informal training will include partnering meetings, weekly briefing meetings, “tail-gate” meetings, etc. Formal training may include classroom training, videos, printed materials, etc. On-site pollution prevention training may be conducted on an ongoing basis during project construction.

3.3.4 Preventive Maintenance

The effectiveness of the control practices and other BMPs described in this SWPPP depends on proper maintenance. Preventive maintenance is addressed in more detail in Section 4, Maintenance of Controls.

3.3.5 Inspections

A program for the regular inspection, maintenance, and repair of BMPs is described in Section 5 of this SWPPP. Inspection frequency will be in accordance with the AZCGP requirements or as requested by the Engineer of Record.

4. MAINTENANCE OF CONTROLS

Inspections of the construction site will occur on a regular basis, after storm events, and at the request of the Engineer of Record (see Section 5, Inspections). BMPs will be cleaned or replaced when design capacity is reduced by one-third. Sediment shall be removed when sediment is 1/3 the height of the silt fence or ½ the height of a fiber roll. Sediment basins and traps will be cleaned when the sediment storage zone is one-third full. Inspections conducted after storm events will evaluate the effectiveness of existing BMPs. When deficiencies are noted during inspections and after storm inspections, the contractor shall take immediate steps to make the required corrections as soon as practical. Deficiencies will be fully corrected, to the satisfaction of the Engineer of Record, within four calendar days or before the next anticipated storm event, whichever is sooner. Deficiencies noted between designated inspections will be corrected within the time period directed by the Engineer of Record but not later than four calendar days after observation. Direct inflows of pollutants, including turbid water and sediment into a watercourse, will be corrected by the end of the same day or work shift in which the inflow is observed.

Repair, replacement, and preventive maintenance of BMPs will be documented on the BMP Maintenance Record form in Appendix F. The SWPPP will be updated within 7 days to reflect any changes in the BMPs.

Failure to implement adjustments within the specified time periods may be cause for the Engineer of Record to reject the contractor's ECC and issue a stop work order for the affected portions of the project.

5. INSPECTIONS

5.1 INSPECTION FREQUENCY AND PROTOCOLS

The ECC will inspect the project (see Section 1.1 for ECC qualifications). At a minimum, the project will be inspected at least every 14 calendar days and within 24 hours after any storm event of 0.50 inch or more. A reduced monthly inspection frequency may be implemented if inspections occur any time rain is predicted and within 24 hours after rain events if (1) the site has been temporarily stabilized, (2) runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists). Additional inspections may be requested by the Engineer of Record. When possible, an inspection will be conducted before a predicted rain event.

Pre-Storm Inspection Strategy
Prior to an anticipated storm event, the contractor may take the following actions:

1. Cover secondary containments.
2. Check freeboard at all impoundments and concrete washout pits.
3. Never store equipment or materials in washes.
4. Install riprap or erosion blanket at all pipe culvert outlets.
5. Review all bridge sites to ensure that temporary pipes are clear and that all on-site containment berms are of adequate height and compaction.
6. Inspect all down drains for obstructions.
7. Develop telephone tree for storm notification.
8. Arrange for an erosion control person to be on-site during the storm event.
9. Review daily weather data and forecast. Alert team to impending storm events.

The contractor will monitor rainfall on the site with a commercially manufactured rain gauge accurate to within 0.10 inch of rain installed within the project limits. The inspections will include disturbed areas, temporarily stabilized areas, areas used for storage of materials and equipment, material processing areas, locations where vehicles enter or exit the site, potential discharge points, and all of the erosion and sediment controls included in the SWPPP.

For each inspection, the contractor's ECC will use the Construction Site Inspection Log and Monitoring Log, if applicable, provided in Appendix E-1 and E-2 for guidance. Inspectors will look for evidence of, or potential for, pollutants entering the drainage system at accessible discharge points or at nearby downstream locations if discharge points are inaccessible. The inspector will observe all erosion and sedimentation controls for effectiveness and make recommendations on improvements or repair of such controls, if needed, in the Compliance Evaluation Report (CER, Appendix E-3). Documentation of maintenance and repairs performed on the control structures will be included in the SWPPP using the form provided in Appendix F.

5.2 INSPECTION REPORTING PROCEDURES AND DOCUMENTATION

Following the inspection, the ECC will summarize the inspection findings in the CER (see Appendix E-3) as described in the AZCGP. The CER will document any noncompliance with the conditions of the AZCGP and any follow-up actions necessary to correct problems identified. If follow-up actions are necessary, the SWPPP will be modified within 7 calendar days. When deficiencies are noted during scheduled inspections, the contractor shall take immediate steps to make the required corrections as soon as practicable. Deficiencies shall be fully corrected, to the satisfaction of the Engineer of Record, within 4 calendar days or by the next anticipated storm event, whichever is sooner. Deficiencies noted between designated inspections shall be corrected within the time period directed by the Engineer of Record, but not later than 4 calendar days after observation. Direct inflows of sediment into a watercourse shall be corrected by the end of the same day or work shift in which the inflow is observed.

Where the CER does not identify any noncompliance conditions, the CER will contain a certification that the construction project or site is being operated in compliance with the SWPPP and the AZCGP. The CER will be signed by the ECC in compliance with the AZCGP signature requirements.

Copies of the completed CER shall be retained on-site in the SWPPP file throughout the construction period and for a period of 3 years following completion of construction. The ECC shall also provide a copy of the CER to the Engineer of Record following each inspection. Rainfall records shall be submitted to the Engineer of Record on a monthly basis. In addition to the CER, the contractor shall keep records of the major construction activities, including the erosion control measures associated with these activities. In particular, the contractor shall keep a record of the following activities:

- The dates when major grading activities (including clearing and grubbing, excavation, and embankment construction) occur in a particular area or portion of the site.
- The dates when construction activities cease in an area, temporarily or permanently.
- The dates when an area is stabilized, temporarily or permanently (see Appendix C).

Such information shall be noted within 2 working days of the occurrence of any of the listed activities, and a copy of the report shall be included in the SWPPP. The contractor shall also provide one copy of such records, and any subsequent updated information, to the Engineer of Record within 3 working days of completion or amendment of the report. All inspection records and reports will be retained by the contractor for a period of 3 years following submittal of the Notice of Termination (NOT).

6. SWPPP MODIFICATIONS AND DOCUMENTATION

6.1 MAINTAINING UPDATED SWPPP

Maintaining an updated SWPPP is an integral part of an effective storm water program and is required under the AZCGP. The SWPPP will be amended within 7 calendar days when any of the following occur:

- There is a change is design, construction, operation, or maintenance at the facility that has a significant effect on the discharge or potential for discharge of pollutants from the facility.
- During inspections, monitoring, or investigations by inspectors or by local, state, tribal, or federal officials, it is determined that there is a discharge that is causing or contributing to a violation of water quality standards or that the SWPPP is otherwise not effective in achieving the general objectives of controlling pollutants in discharges from the facility.

6.2 PUBLIC NOTIFICATION AND SWPPP DOCUMENTATION

The following information will be posted on the construction site bulletin board at the job site for this construction project:

- AZPDES and/or NPDES authorization number with copy of contractor's Notice of Intent Certificate [NOI]
- Construction site contact name and telephone number
- Brief project description
- Location of SWPPP
- Copy of 404 permit special 401 certification (if applicable)

The contractor's ECC shall maintain the SWPPP along with completed inspection forms and other AZPDES records. The ECC will maintain a current copy of the SWPPP, including all associated records and forms, at the job site from the time construction begins until completion of the project. The SWPPP will be available for public inspection and for use by the Engineer of Record. The ECC will provide copies of any or all of such documents to the Engineer of Record upon request. When requested, such copies shall be provided within 3 working days of the request.

A copy of the SWPPP (including inspection forms) and all data used to complete the NOI and the NOT not previously provided, will be provided to the Engineer of Record at the completion of the project. The contractor will retain his own records for a period of at least 3 years from the filing of the contractor's NOT.

7. AZPDES AND OTHER PERMIT REQUIREMENTS

7.1 COPY OF CONSTRUCTION GENERAL PERMIT (AZPDES AND/OR NPDES)

Copies of the AZCGP and/or NPDES CGP, NOI, ADEQ authorization, and other project-related documents will be included in the SWPPP file maintained by the ECC. The NOI and ADEQ authorization may be found in Appendix G and the AZCGP and/or NPDES CGP and other project-related documents may be found in Appendix H.

7.2 APPLICABLE STATE, FEDERAL, OR LOCAL PLANS

This SWPPP is consistent with the AZPDES and/or NPDES Construction General Permit and the ADOT SSWMP. The ADOT SSWMP and accompanying guidance manuals provide guidance on construction controls, BMPs, and performance evaluations.

8. SWPPP CERTIFICATION

8.1 SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Project Name: The Residences At Morning Vista

Project No.: GEI 20124

Owner Name:

DSW Commercial Real Estate
1795 E. Skyline Dr., Suite 193
Tucson, AZ 85718
520-297-8929

Michael A. Sarabia

9-30-25

Date

8.2 SWPPP APPROVAL

Engineer's Approval and Certification of the SWPPP

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Project Name: Residences At Morning Vista

Project No.: GEI 20124

Jason Morse, P.E.

9/30/25

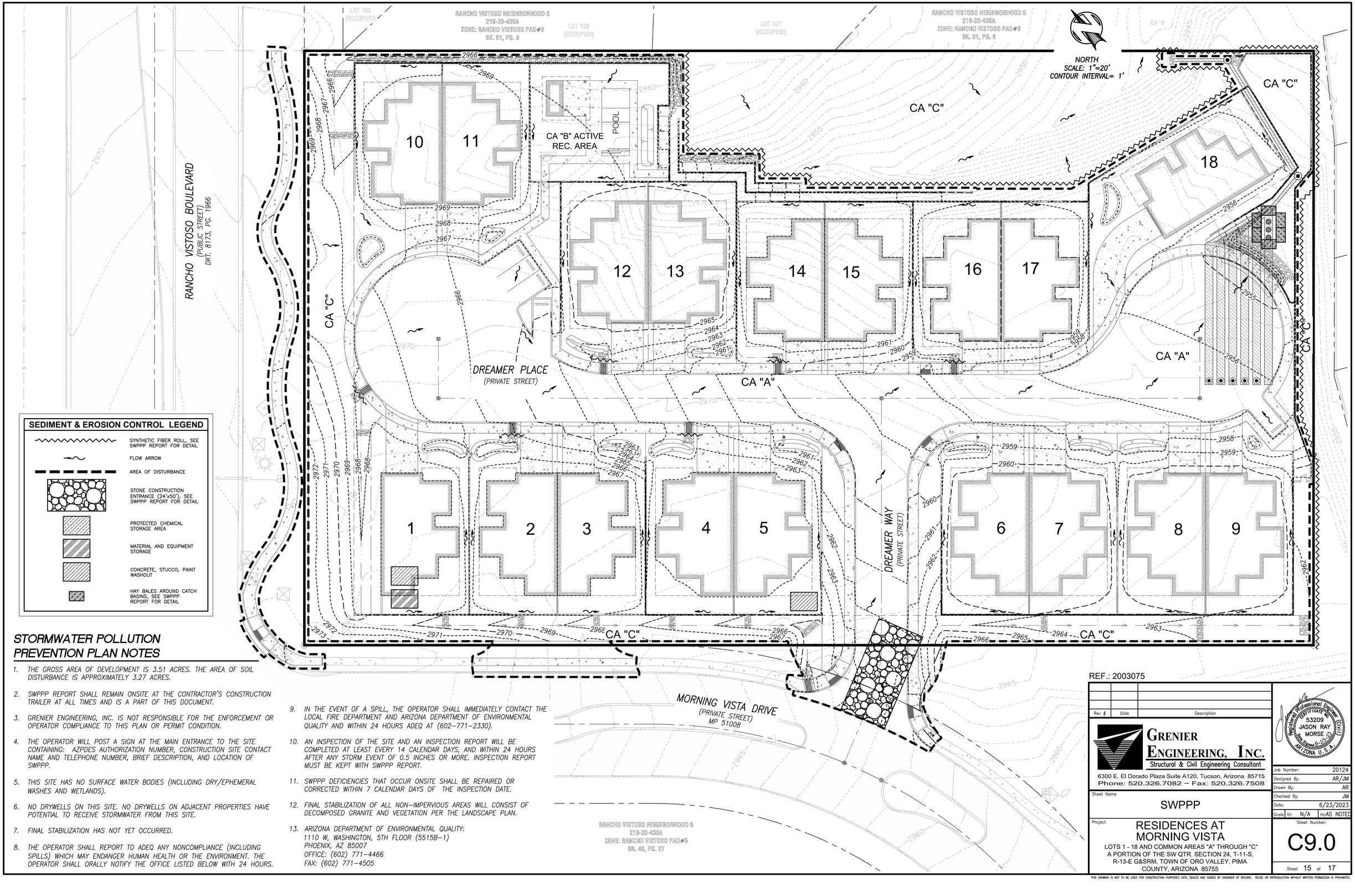
Date

SWPPP Appendices

Appendix	Title
A	Site Maps and/or Plan Sheets
B	SWPPP Index Sheet and Erosion and Sediment Control Plan BMP Detail Sheets (example; project-specific)
C	Grading and Stabilization Record (blank form)
D	Spill Report (blank form)
E-1	Construction Site Inspection Log (blank form)
E-2	Storm Water Monitoring Log (if applicable, blank form)
E-3	Compliance Evaluation Report (blank form)
F	BMP Maintenance and Repair Documentation (blank form)
G	Notice of Intent/ADEQ Authorization
H	Copy of the Arizona Construction General Permit
I	Delegation of Authority
J	Dust Control Permit
K	Contractor Certification Form
L	Construction Schedule

APPENDIX A

Site Maps and/or Plan Sheets



SEDIMENT & EROSION CONTROL LEGEND

- SYNTHETIC FIBER ROLL, SEE SWPPP REPORT FOR DETAIL
- FLOW ARROW
- AREA OF DISTURBANCE
- STONE CONSTRUCTION ENTRANCE (24'x50'), SEE SWPPP REPORT FOR DETAIL
- PROTECTED CHEMICAL STORAGE AREA
- MATERIAL AND EQUIPMENT STORAGE
- CONCRETE, STUCCO, PAINT WASHOUT
- HAY BALES AROUND CATCH BASINS, SEE SWPPP REPORT FOR DETAIL

STORMWATER POLLUTION PREVENTION PLAN NOTES

1. *THE GROSS AREA OF DEVELOPMENT IS 3.51 ACRES. THE AREA OF SOIL DISTURBANCE IS APPROXIMATELY 3.27 ACRES.*
2. *SWPPP REPORT SHALL REMAIN ONSITE AT THE CONTRACTOR'S CONSTRUCTION TRAILER AT ALL TIMES AND IS A PART OF THIS DOCUMENT.*
3. *GRENIER ENGINEERING, INC. IS NOT RESPONSIBLE FOR THE ENFORCEMENT OR OPERATOR COMPLIANCE TO THIS PLAN OR PERMIT CONDITION.*
4. *THE OPERATOR WILL POST A SIGN AT THE MAIN ENTRANCE TO THE SITE CONTAINING: AZPDES AUTHORIZATION NUMBER, CONSTRUCTION SITE CONTACT NAME AND TELEPHONE NUMBER, BRIEF DESCRIPTION, AND LOCATION OF SWPPP.*
5. *THIS SITE HAS NO SURFACE WATER BODIES (INCLUDING DRY/EPHEMERAL WASHES AND WETLANDS).*
6. *NO DRYWELLS ON THIS SITE. NO DRYWELLS ON ADJACENT PROPERTIES HAVE POTENTIAL TO RECEIVE STORMWATER FROM THIS SITE.*
7. *FINAL STABILIZATION HAS NOT YET OCCURRED.*
8. *THE OPERATOR SHALL REPORT TO ADEQ ANY NONCOMPLIANCE (INCLUDING SPILLS) WHICH MAY ENDANGER HUMAN HEALTH OR THE ENVIRONMENT. THE OPERATOR SHALL ORALLY NOTIFY THE OFFICE LISTED BELOW WITH 24 HOURS.*
9. *IN THE EVENT OF A SPILL, THE OPERATOR SHALL IMMEDIATELY CONTACT THE LOCAL FIRE DEPARTMENT AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY AND WITHIN 24 HOURS ADEQ AT (602-771-2330).*
10. *AN INSPECTION OF THE SITE AND AN INSPECTION REPORT WILL BE COMPLETED AT LEAST EVERY 14 CALENDAR DAYS, AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF 0.5 INCHES OR MORE. INSPECTION REPORT MUST BE KEPT WITH SWPPP REPORT.*
11. *SWPPP DEFICIENCIES THAT OCCUR ONSITE SHALL BE REPAIRED OR CORRECTED WITHIN 7 CALENDAR DAYS OF THE INSPECTION DATE.*
12. *FINAL STABILIZATION OF ALL NON-IMPERVIOUS AREAS WILL CONSIST OF DECOMPOSED GRANITE AND VEGETATION PER THE LANDSCAPE PLAN.*
13. *ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY:*
    1110 W, WASHINGTON, 5TH FLOOR (5515B-1)
    PHOENIX, AZ 85007
    OFFICE: (602) 771-4466
    FAX: (602) 771-4505

REF.: 2003075

Rev #	Date	Description

GRENIER ENGINEERING, INC.
Structural & Civil Engineering Consultant
6300 E. El Dorado Plaza Suite A120, Tucson, Arizona 85715
Phone: 520.326.7082 ~ Fax: 520.326.7508

Registered Professional Engineer
CERTIFICATE NO.
53209
JASON RAY MORSE
Date Signed 6-23-23
ARIZONA U.S.A.
(Civil)

Job Number:	20124
Designed By:	AR/JM
Drawn By:	AR
Checked By:	JM
Date:	6/23/2023
Scale Vt:	N/A Hz: AS NOTED

Sheet Name
SWPPP

Project
RESIDENCES AT MORNING VISTA
LOTS 1 - 18 AND COMMON AREAS "A" THROUGH "C"
A PORTION OF THE SW QTR. SECTION 24, T-11-S, R-13-E G&SRM, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA 85755

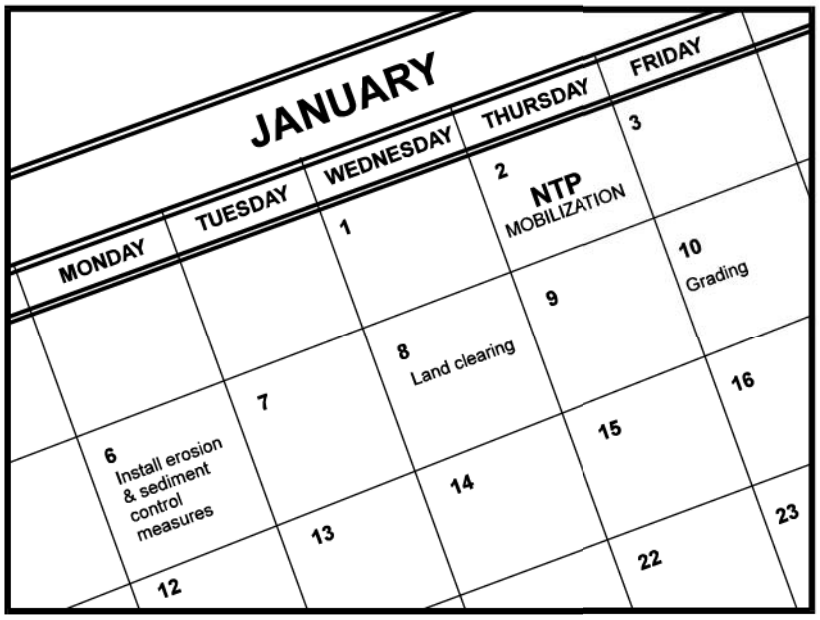
Sheet Number:
C9.0

Sheet 15 of 17

APPENDIX B

Erosion and Sediment Control Plan BMP Detail Sheets

Scheduling EC-1



Objectives

EC	Erosion Control	☑
SE	Sediment Control	☒
TR	Tracking Control	☒
WE	Wind Erosion Control	☒
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Scheduling is the development of a written plan that includes sequencing of construction activities and the implementation of BMPs such as erosion control and sediment control while taking local climate (rainfall, wind, etc.) into consideration. The purpose is to reduce the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking, and to perform the construction activities and control practices in accordance with the planned schedule.

Suitable Applications

Proper sequencing of construction activities to reduce erosion potential should be incorporated into the schedule of every construction project especially during rainy season. Use of other, more costly yet less effective, erosion and sediment control BMPs may often be reduced through proper construction sequencing.

Limitations

- Environmental constraints such as nesting season prohibitions reduce the full capabilities of this BMP.

Implementation

- Avoid rainy periods. Schedule major grading operations during dry months when practical. Allow enough time before rainfall begins to stabilize the soil with vegetation or physical means or to install sediment trapping devices.
- Plan the project and develop a schedule showing each phase of construction. Clearly show how the rainy season relates to soil

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disturbing and re-stabilization activities. Incorporate the construction schedule into the SWPPP.

- Include on the schedule, details on the rainy season implementation and deployment of:
  - Erosion control BMPs
  - Sediment control BMPs
  - Tracking control BMPs
  - Wind erosion control BMPs
  - Non-stormwater BMPs
  - Waste management and materials pollution control BMPs
- Include dates for activities that may require non-stormwater discharges such as dewatering, sawcutting, grinding, drilling, boring, crushing, blasting, painting, hydro-demolition, mortar mixing, pavement cleaning, etc.
- Work out the sequencing and timetable for the start and completion of each item such as site clearing and grubbing, grading, excavation, paving, foundation pouring utilities installation, etc., to minimize the active construction area during the rainy season.
  - Sequence trenching activities so that most open portions are closed before new trenching begins.
  - Incorporate staged seeding and re-vegetation of graded slopes as work progresses.
  - Schedule establishment of permanent vegetation during appropriate planting time for specified vegetation.
- Non-active areas should be stabilized as soon as practical after the cessation of soil disturbing activities or one day prior to the onset of precipitation.
- Monitor the weather forecast for rainfall.
- When rainfall is predicted, adjust the construction schedule to allow the implementation of soil stabilization and sediment treatment controls on all disturbed areas prior to the onset of rain.
- Be prepared year round to deploy erosion control and sediment control BMPs. Erosion may be caused during dry seasons by un-seasonal rainfall, wind, and vehicle tracking. Keep the site stabilized year round, and retain and maintain rainy season sediment trapping devices in operational condition.
- Apply permanent erosion control to areas deemed substantially complete during the project's defined seeding window.

Costs

Construction scheduling to reduce erosion may increase other construction costs due to reduced economies of scale in performing site grading. The cost effectiveness of scheduling techniques should be compared with the other less effective erosion and sedimentation controls to achieve a cost effective balance.

Inspection and Maintenance

- Verify that work is progressing in accordance with the schedule. If progress deviates, take corrective actions.
- Amend the schedule when changes are warranted.
- Amend the schedule prior to the rainy season to show updated information on the deployment and implementation of construction site BMPs.

References

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities Developing Pollution Prevention Plans and Best Management Practices (EPA 832-R-92-005), U.S. Environmental Protection Agency, Office of Water, September 1992.

Street Sweeping and Vacuuming SE-7

Objectives

EC	Erosion Control	
SE	Sediment Control	☒
TR	Tracking Control	☑
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☑
Metals	
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

Suitable Applications

Sweeping and vacuuming are suitable anywhere sediment is tracked from the project site onto public or private paved streets and roads, typically at points of egress. Sweeping and vacuuming are also applicable during preparation of paved surfaces for final paving.

Limitations

Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked (caked soil may need to be scraped loose).

Implementation

- Controlling the number of points where vehicles can leave the site will allow sweeping and vacuuming efforts to be focused, and perhaps save money.
- Inspect potential sediment tracking locations daily.
- Visible sediment tracking should be swept or vacuumed on a daily basis.

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- Do not use kick brooms or sweeper attachments. These tend to spread the dirt rather than remove it.
- If not mixed with debris or trash, consider incorporating the removed sediment back into the project

Costs

Rental rates for self-propelled sweepers vary depending on hopper size and duration of rental. Expect rental rates from $58/hour (3 yd^3 hopper) to $88/hour (9 yd^3 hopper), plus operator costs. Hourly production rates vary with the amount of area to be swept and amount of sediment. Match the hopper size to the area and expect sediment load to minimize time spent dumping.

Inspection and Maintenance

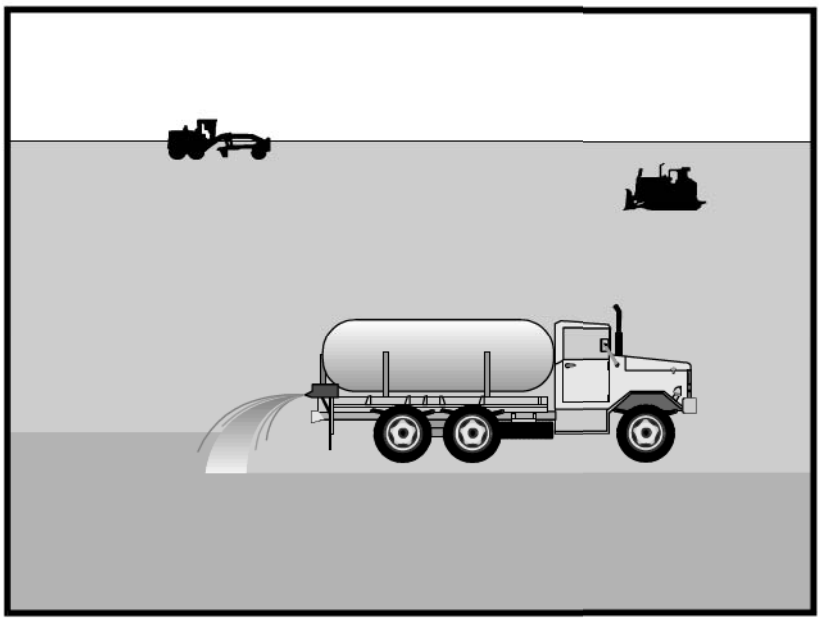
- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
- When actively in use, points of ingress and egress must be inspected daily.
- When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. More frequent removal, even continuous removal, may be required in some jurisdictions.
- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- Adjust brooms frequently; maximize efficiency of sweeping operations.
- After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Labor Surcharge and Equipment Rental Rates, State of California Department of Transportation (Caltrans), April 1, 2002 – March 31, 2003.

Wind Erosion Control WE-1



Objectives

EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	☑
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Wind erosion or dust control consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water or other dust palliatives.

Suitable Applications

Wind erosion control BMPs are suitable during the following construction activities:

- Construction vehicle traffic on unpaved roads
- Drilling and blasting activities
- Sediment tracking onto paved roads
- Soils and debris storage piles
- Batch drop from front-end loaders
- Areas with unstabilized soil
- Final grading/site stabilization

Limitations

- Watering prevents dust only for a short period and should be applied daily (or more often) to be effective.
- Over watering may cause erosion.

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- Oil or oil-treated subgrade should not be used for dust control because the oil may migrate into drainageways and/or seep into the soil.
- Effectiveness depends on soil, temperature, humidity, and wind velocity.
- Chemically treated sub grades may make the soil water repellant, interfering with long-term infiltration and the vegetation/re-vegetation of the site. Some chemical dust suppressants may be subject to freezing and may contain solvents and should be handled properly.
- Asphalt, as a mulch tack or chemical mulch, requires a 24-hour curing time to avoid adherence to equipment, worker shoes, etc. Application should be limited because asphalt surfacing may eventually migrate into the drainage system.
- In compacted areas, watering and other liquid dust control measures may wash sediment or other constituents into the drainage system.

Implementation

General

California's Mediterranean climate, with short wet seasons and long hot dry seasons, allows the soils to thoroughly dry out. During these dry seasons, construction activities are at their peak, and disturbed and exposed areas are increasingly subject to wind erosion, sediment tracking and dust generated by construction equipment.

Dust control, as a BMP, is a practice that is already in place for many construction activities. Los Angeles, the North Coast, and Sacramento, among others, have enacted dust control ordinances for construction activities that cause dust to be transported beyond the construction project property line.

Recently, the State Air Resources Control Board has, under the authority of the Clean Air Act, started to address air quality in relation to inhalable particulate matter less than 10 microns (PM-10). Approximately 90 percent of these small particles are considered to be dust. Existing dust control regulations by local agencies, municipal departments, public works department, and public health departments are in place in some regions within California.

Many local agencies require dust control in order to comply with local nuisance laws, opacity laws (visibility impairment) and the requirements of the Clean Air Act. The following are measures that local agencies may have already implemented as requirements for dust control from contractors:

- Construction and Grading Permits: Require provisions for dust control plans.
- Opacity Emission Limits: Enforce compliance with California air pollution control laws.
- Increase Overall Enforcement Activities: Priority given to cases involving citizen complaints.
- Maintain Field Application Records: Require records of dust control measures from contractor;
- Stormwater Pollution Prevention Plan: (SWPPP): Integrate dust control measures into SWPPP.

Dust Control Practices

Dust control BMPs generally stabilize exposed surfaces and minimize activities that suspend or track dust particles. The following table shows dust control practices that can be applied to site conditions that cause dust. For heavily traveled and disturbed areas, wet suppression (watering), chemical dust suppression, gravel asphalt surfacing, temporary gravel construction entrances, equipment wash-out areas, and haul truck covers can be employed as dust control applications. Permanent or temporary vegetation and mulching can be employed for areas of occasional or no construction traffic. Preventive measures would include minimizing surface areas to be disturbed, limiting onsite vehicle traffic to 15 mph, and controlling the number and activity of vehicles on a site at any given time.

SITE CONDITION	DUST CONTROL PRACTICES								
	Permanent Vegetation	Mulching	Wet Suppression (Watering)	Chemical Dust Suppression	Gravel or Asphalt	Silt Fences	Temporary Gravel Construction Entrances/Equipment Wash Down	Haul Truck Covers	Minimize Extent of Disturbed Area
Disturbed Areas not Subject to Traffic	X	X	X	X	X				X
Disturbed Areas Subject to Traffic			X	X	X		X		X
Material Stock Pile Stabilization			X	X		X			X
Demolition			X				X	X	
Clearing/ Excavation			X	X		X			X
Truck Traffic on Unpaved Roads			X	X	X		X	X	
Mud/Dirt Carry Out					X		X		

Additional preventive measures include:

- Schedule construction activities to minimize exposed area (EC-1, Scheduling).
- Quickly stabilize exposed soils using vegetation, mulching, spray-on adhesives, calcium chloride, sprinkling, and stone/gravel layering.
- Identify and stabilize key access points prior to commencement of construction.
- Minimize the impact of dust by anticipating the direction of prevailing winds.
- Direct most construction traffic to stabilized roadways within the project site.
- Water should be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
- All distribution equipment should be equipped with a positive means of shutoff.
- Unless water is applied by means of pipelines, at least one mobile unit should be available at all times to apply water or dust palliative to the project.

- If reclaimed waste water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water should not be conveyed in tanks or drain pipes that will be used to convey potable water and there should be no connection between potable and non-potable supplies. Non-potable tanks, pipes, and other conveyances should be marked, "NON-POTABLE WATER - DO NOT DRINK."
- Materials applied as temporary soil stabilizers and soil binders also generally provide wind erosion control benefits.
- Pave or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads.
- Provide covers for haul trucks transporting materials that contribute to dust.
- Provide for wet suppression or chemical stabilization of exposed soils.
- Provide for rapid clean up of sediments deposited on paved roads. Furnish stabilized construction road entrances and vehicle wash down areas.
- Stabilize inactive construction sites using vegetation or chemical stabilization methods.
- Limit the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

For chemical stabilization, there are many products available for chemically stabilizing gravel roadways and stockpiles. If chemical stabilization is used, the chemicals should not create any adverse effects on stormwater, plant life, or groundwater.

Costs

Installation costs for water and chemical dust suppression are low, but annual costs may be quite high since these measures are effective for only a few hours to a few days.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Check areas protected to ensure coverage.
- Most dust control measures require frequent, often daily, or multiple times per day attention.

References

Best Management Practices and Erosion Control Manual for Construction Sites, Flood Control District of Maricopa County, Arizona, September 1992.

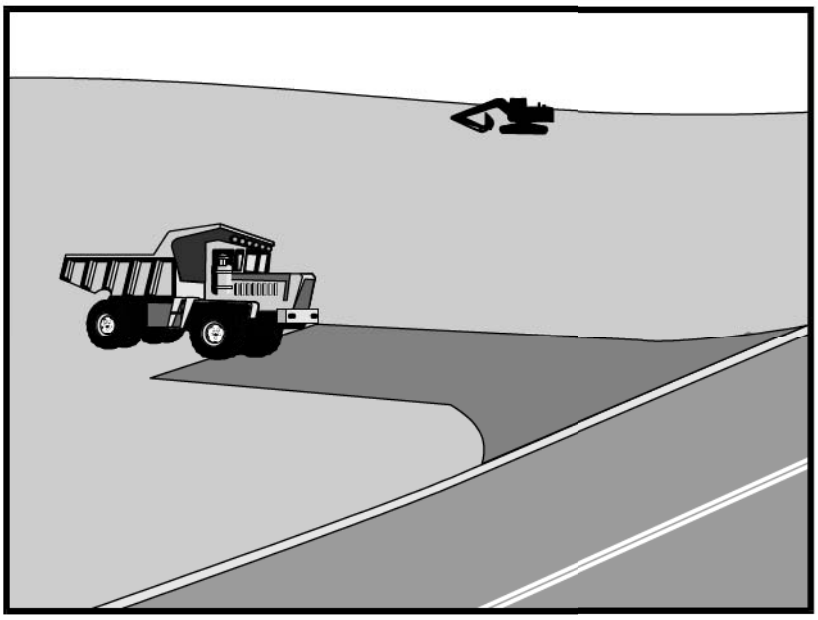
California Air Pollution Control Laws, California Air Resources Board, 1992.

Caltrans, Standard Specifications, Sections 10, "Dust Control"; Section 17, "Watering"; and Section 18, "Dust Palliative".

Prospects for Attaining the State Ambient Air Quality Standards for Suspended Particulate Matter (PM10), Visibility Reducing Particles, Sulfates, Lead, and Hydrogen Sulfide, California Air Resources Board, April 1991.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stabilized Construction Entrance/Exit TC-1



Objectives

EC	Erosion Control	☒
SE	Sediment Control	☒
TC	Tracking Control	☑
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

A stabilized construction access is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Suitable Applications

Use at construction sites:

- Where dirt or mud can be tracked onto public roads.
- Adjacent to water bodies.
- Where poor soils are encountered.
- Where dust is a problem during dry weather conditions.

Limitations

- Entrances and exits require periodic top dressing with additional stones.
- This BMP should be used in conjunction with street sweeping on adjacent public right of way.
- Entrances and exits should be constructed on level ground only.
- Stabilized construction entrances are rather expensive to construct and when a wash rack is included, a sediment trap of some kind must also be provided to collect wash water runoff.

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Implementation

General

A stabilized construction entrance is a pad of aggregate underlain with filter cloth located at any point where traffic will be entering or leaving a construction site to or from a public right of way, street, alley, sidewalk, or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking of sediment onto public rights of way or streets. Reducing tracking of sediments and other pollutants onto paved roads helps prevent deposition of sediments into local storm drains and production of airborne dust.

Where traffic will be entering or leaving the construction site, a stabilized construction entrance should be used. NPDES permits require that appropriate measures be implemented to prevent tracking of sediments onto paved roadways, where a significant source of sediments is derived from mud and dirt carried out from unpaved roads and construction sites.

Stabilized construction entrances are moderately effective in removing sediment from equipment leaving a construction site. The entrance should be built on level ground. Advantages of the Stabilized Construction Entrance/Exit is that it does remove some sediment from equipment and serves to channel construction traffic in and out of the site at specified locations. Efficiency is greatly increased when a washing rack is included as part of a stabilized construction entrance/exit.

Design and Layout

- Construct on level ground where possible.
- Select 3 to 6 in. diameter stones.
- Use minimum depth of stones of 12 in. or as recommended by soils engineer.
- Construct length of 50 ft minimum, and 30 ft minimum width.
- Rumble racks constructed of steel panels with ridges and installed in the stabilized entrance/exit will help remove additional sediment and to keep adjacent streets clean.
- Provide ample turning radii as part of the entrance.
- Limit the points of entrance/exit to the construction site.
- Limit speed of vehicles to control dust.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Route runoff from stabilized entrances/exits through a sediment trapping device before discharge.
- Design stabilized entrance/exit to support heaviest vehicles and equipment that will use it.
- Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. Do not use asphalt concrete (AC) grindings for stabilized construction access/roadway.

- If aggregate is selected, place crushed aggregate over geotextile fabric to at least 12 in. depth, or place aggregate to a depth recommended by a geotechnical engineer. A crushed aggregate greater than 3 in. but smaller than 6 in. should be used.
- Designate combination or single purpose entrances and exits to the construction site.
- Require that all employees, subcontractors, and suppliers utilize the stabilized construction access.
- Implement SE-7, Street Sweeping and Vacuuming, as needed.
- All exit locations intended to be used for more than a two-week period should have stabilized construction entrance/exit BMPs.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect local roads adjacent to the site daily. Sweep or vacuum to remove visible accumulated sediment.
- Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment.
- Keep all temporary roadway ditches clear.
- Check for damage and repair as needed.
- Replace gravel material when surface voids are visible.
- Remove all sediment deposited on paved roadways within 24 hours.
- Remove gravel and filter fabric at completion of construction

Costs

Average annual cost for installation and maintenance may vary from $1,200 to $4,800 each, averaging $2,400 per entrance. Costs will increase with addition of washing rack, and sediment trap. With wash rack, costs range from $1,200 - $6,000 each, averaging $3,600 per entrance.

References

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

National Management Measures to Control Nonpoint Source Pollution from Urban Areas, USEPA Agency, 2002.

Proposed Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, Work Group Working Paper, USEPA, April 1992.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

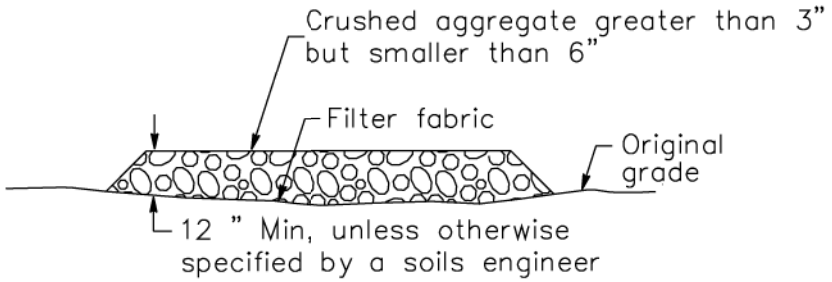
Stormwater Management of the Puget Sound Basin, Technical Manual, Publication #91-75, Washington State Department of Ecology, February 1992.

Virginia Erosion and Sedimentation Control Handbook, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, 1991.

Guidance Specifying Management Measures for Nonpoint Pollution in Coastal Waters, EPA 840-B-9-002, USEPA, Office of Water, Washington, DC, 1993.

Water Quality Management Plan for the Lake Tahoe Region, Volume II, Handbook of Management Practices, Tahoe Regional Planning Agency, November 1988.

Stabilized Construction Entrance/Exit TC-1



SECTION B–B
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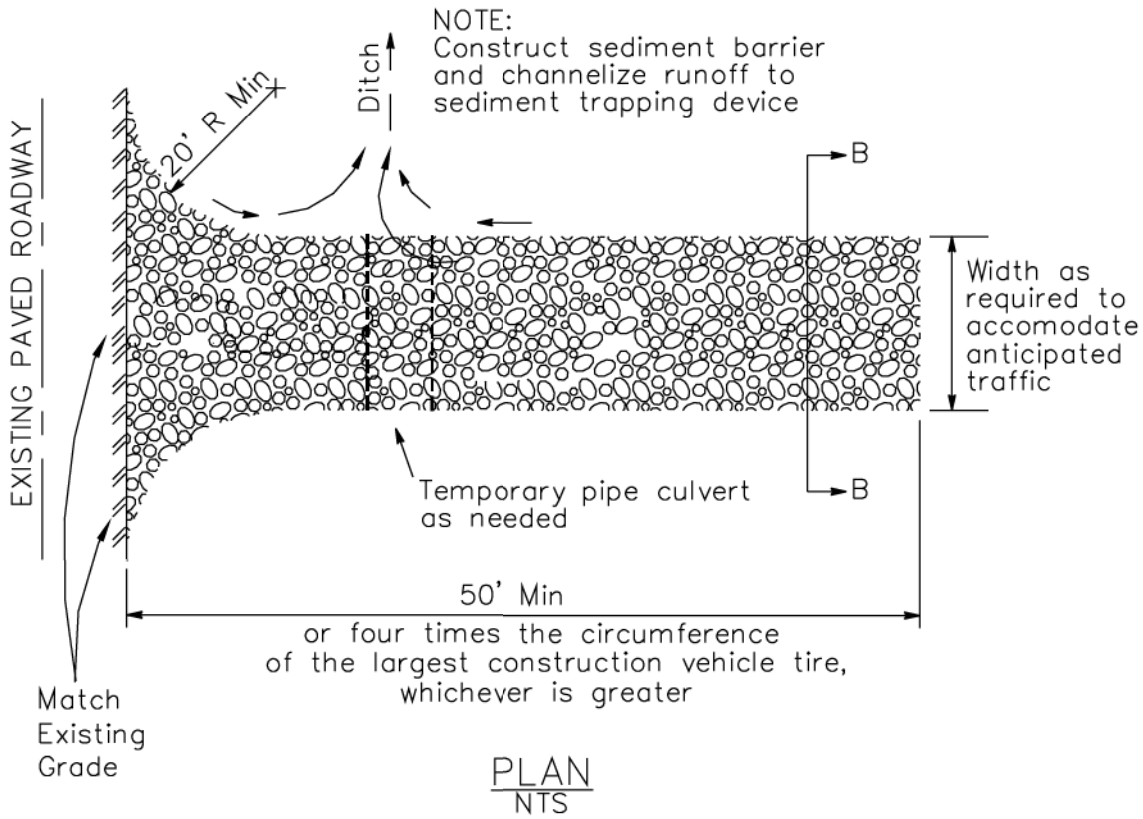
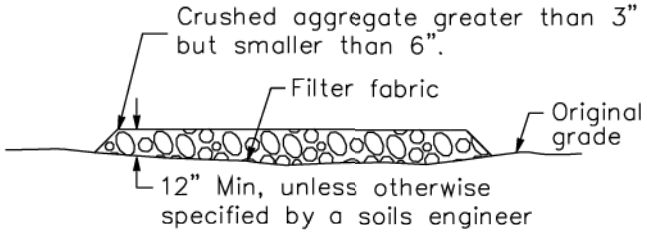


PLAN
NTS

Stabilized Construction Entrance/Exit TC-1



SECTION B–B
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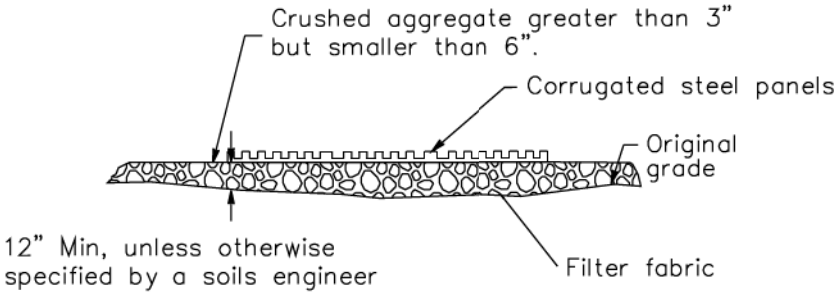
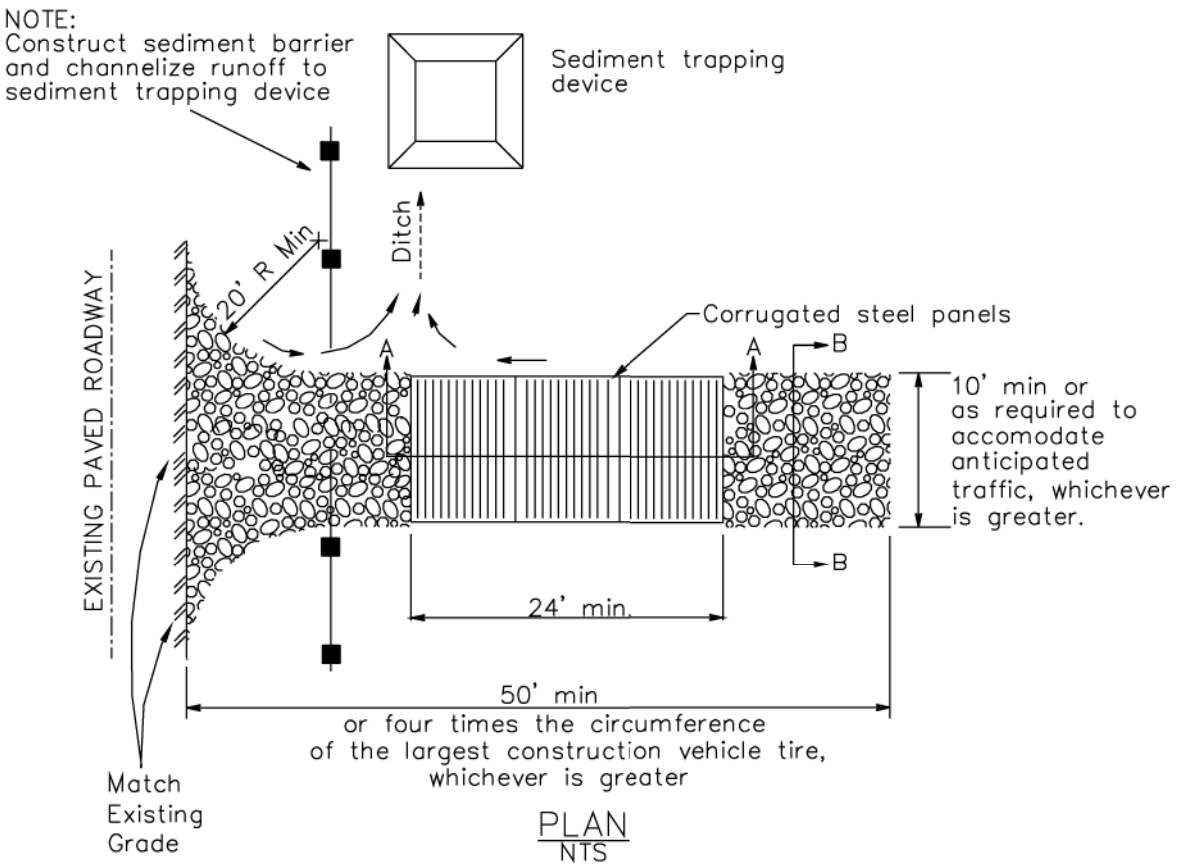
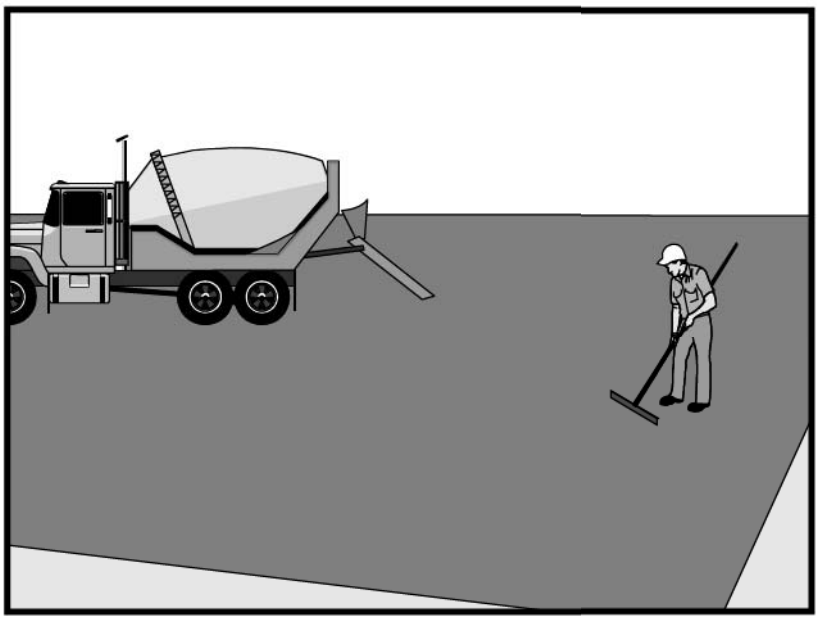


SECTION A–A
NOT TO SCALE



PLAN
NTS

Paving and Grinding Operations NS-3



Objectives		
EC	Erosion Control	
SE	Sediment Control	
TR	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	☒

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent runon and runoff pollution, properly disposing of wastes, and training employees and subcontractors.

Suitable Applications

These procedures are implemented where paving, surfacing, resurfacing, or sawcutting, may pollute stormwater runoff or discharge to the storm drain system or watercourses.

Limitations

- Finer solids are not effectively removed by filtration systems.
- Paving opportunities may be limited during wet weather.

Implementation

General

- Avoid paving during the wet season when feasible.
- Reschedule paving and grinding activities if rain is in the forecast.
- Train employees and sub-contractors in pollution prevention and reduction.
- Store materials away from drainage courses to prevent stormwater runon (see WM-1, Material Delivery and Storage).

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- Protect drainage courses, particularly in areas with a grade, by employing BMPs to divert runoff or to trap and filter sediment.
- If paving involves an onsite mixing plant, follow the stormwater permitting requirements for industrial activities.
- Stockpile material removed from roadways away from drain inlets, drainage ditches, and watercourses, These materials should be stored consistent with WM-3, Stockpile Management.
- Disposal of PCC and AC waste should be in conformance with WM-8, Concrete Waste Management.

Saw Cutting, Grinding, and Pavement Removal

- Shovel or vacuum saw-cut slurry and remove from site. Cover or barricade storm drains during saw cutting to contain slurry.
- When paving involves AC, the following steps should be implemented to prevent the discharge of grinding residue, uncompacted or loose AC, tack coats, equipment cleaners, or unrelated paving materials:
  - AC grindings, pieces, or chunks used in embankments or shoulder backing must not be allowed to enter any storm drains or watercourses. Install silt fence until structure is stabilized or permanent controls are in place. Examples of temporary perimeter controls can be found in EC-9, Earth Dikes and Drainage Swales; SE-1, Silt Fence; or SE-5, Fiber Rolls.
  - Collect and remove all broken asphalt and recycle when practical. Old or spilled asphalt must be recycled or disposed.
  - Any AC chunks and pieces used in embankments must be placed above the water table and covered by at least 1 ft of material.
- Do not allow saw-cut slurry to enter storm drains or watercourses. Residue from grinding operations should be picked up by means of a vacuum attachment to the grinding machine, should not be allowed to flow across the pavement, and should not be left on the surface of the pavement. See also WM-8, Concrete Waste Management, and WM-10, Liquid Waste Management.
- Dig out activities should not be conducted in the rain.
- Collect dig out material by mechanical or manual methods. This material may be recycled for use as shoulder backing or base material.
- If dig out material cannot be recycled, transport the material back to an approved storage site.

Asphaltic Concrete Paving

- If paving involves asphaltic cement concrete, follow these steps:

- Do not allow sand or gravel placed over new asphalt to wash into storm drains, streets, or creeks. Vacuum or sweep loose sand and gravel and properly dispose of this waste by referring to WM-5, Solid Waste Management.

- Old asphalt must be disposed of properly. Collect and remove all broken asphalt from the site and recycle whenever possible.

Portland Cement Concrete Paving

- Do not wash sweepings from exposed aggregate concrete into a storm drain system. Collect and return to aggregate base stockpile or dispose of properly.

- Allow aggregate rinse to settle. Then, either allow rinse water to dry in a temporary pit as described in WM-8, Concrete Waste Management, or pump the water to the sanitary sewer if allowed by the local wastewater authority.

Sealing Operations

- During chip seal application and sweeping operations, petroleum or petroleum covered aggregate must not be allowed to enter any storm drain or water courses. Apply temporary perimeter controls until structure is stabilized.

- Drainage inlet structures and manholes should be covered with filter fabric during application of seal coat, tack coat, slurry seal, and fog seal.

- Seal coat, tack coat, slurry seal, or fog seal should not be applied if rainfall is predicted to occur during the application or curing period.

Paving Equipment

- Leaks and spills from paving equipment can contain toxic levels of heavy metals and oil and grease. Place drip pans or absorbent materials under paving equipment when not in use. Clean up spills with absorbent materials rather than burying. See NS-10, Vehicle and Equipment Maintenance, WM-4, Spill Prevention and Control, and WM-10, Liquid Waste Management.

- Substances used to coat asphalt transport trucks, and asphalt spreading equipment should not contain soap and should be non-foaming and non-toxic.

- Use only non-toxic substances to coat asphalt transport trucks and asphalt spreading equipment.

- Paving equipment parked onsite should be parked over plastic to prevent soil contamination.

- Clean asphalt coated equipment offsite whenever possible. When cleaning dry, hardened asphalt from equipment, manage hardened asphalt debris as described in WM-5, Solid Waste Management. Any cleaning onsite should follow NS-8, Vehicle and Equipment Cleaning.

Thermoplastic Striping

- Thermoplastic striper and pre-heater equipment shutoff valves should be inspected to ensure that they are working properly to prevent leaking thermoplastic from entering drain inlets, the stormwater drainage system, or watercourses.
- Pre-heaters should be filled carefully to prevent splashing or spilling of hot thermoplastic. Leave six inches of space at the top of the pre-heater container when filling thermoplastic to allow room for material to move when the vehicle is deadheaded.
- Do not pre-heat, transfer, or load thermoplastic near drain inlets or watercourses.
- Clean truck beds daily of loose debris and melted thermoplastic. When possible, recycle thermoplastic material.

Raised/Recessed Pavement Marker Application and Removal

- Do not transfer or load bituminous material near drain inlets, the stormwater drainage system, or watercourses.
- Melting tanks should be loaded with care and not filled to beyond six inches from the top to leave room for splashing when vehicle is deadheaded.
- When servicing or filling melting tanks, ensure all pressure is released before removing lids to avoid spills.
- On large-scale projects, use mechanical or manual methods to collect excess bituminous material from the roadway after removal of markers.

Costs

- All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Keep ample supplies of drip pans or absorbent materials onsite.
- Inspect and maintain machinery regularly to minimize leaks and drips.

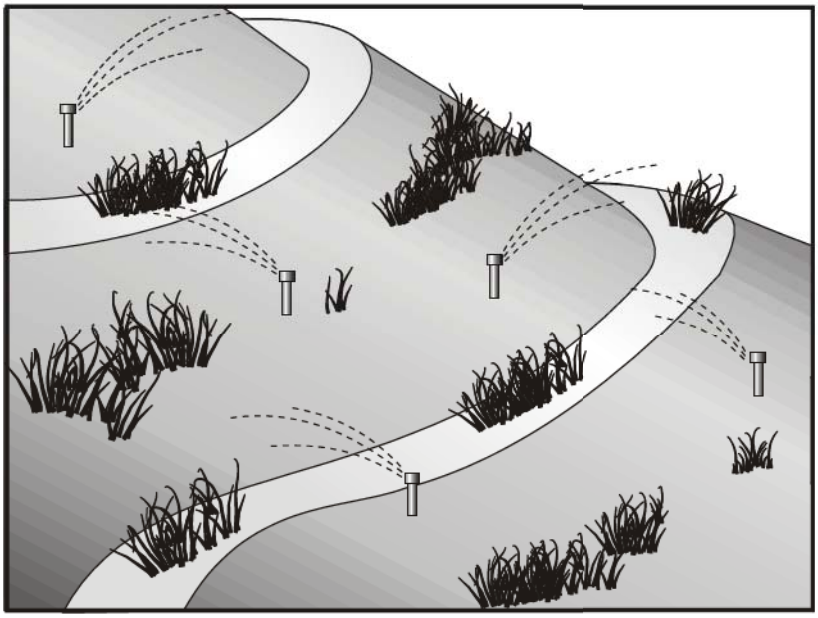
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Hot Mix Asphalt-Paving Handbook AC 150/5370-14, Appendix I, U.S. Army Corps of Engineers, July 1991.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Potable Water/Irrigation NS-7



Description and Purpose

Potable Water/Irrigation consists of practices and procedures to manage the discharge of potential pollutants generated during discharges from irrigation water lines, landscape irrigation, lawn or garden watering, planned and unplanned discharges from potable water sources, water line flushing, and hydrant flushing.

Suitable Applications

Implement this BMP whenever potable water or irrigation water discharges occur at or enter a construction site.

Limitations

None identified.

Implementation

- Direct water from offsite sources around or through a construction site, where feasible, in a way that minimizes contact with the construction site.
- Discharges from water line flushing should be reused for landscaping purposes where feasible.
- Shut off the water source to broken lines, sprinklers, or valves as soon as possible to prevent excess water flow.
- Protect downstream stormwater drainage systems and watercourses from water pumped or bailed from trenches excavated to repair water lines.

Objectives

EC	Erosion Control	
SE	Sediment Control	
TR	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	
Metals	☑
Bacteria	
Oil and Grease	
Organics	☑

Potential Alternatives

None

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- Inspect irrigated areas within the construction limits for excess watering. Adjust watering times and schedules to ensure that the appropriate amount of water is being used and to minimize runoff. Consider factors such as soil structure, grade, time of year, and type of plant material in determining the proper amounts of water for a specific area.

Costs

Cost to manage potable water and irrigation are low and generally considered to be a normal part of related activities.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
- Repair broken water lines as soon as possible.
- Inspect irrigated areas regularly for signs of erosion and/or discharge.

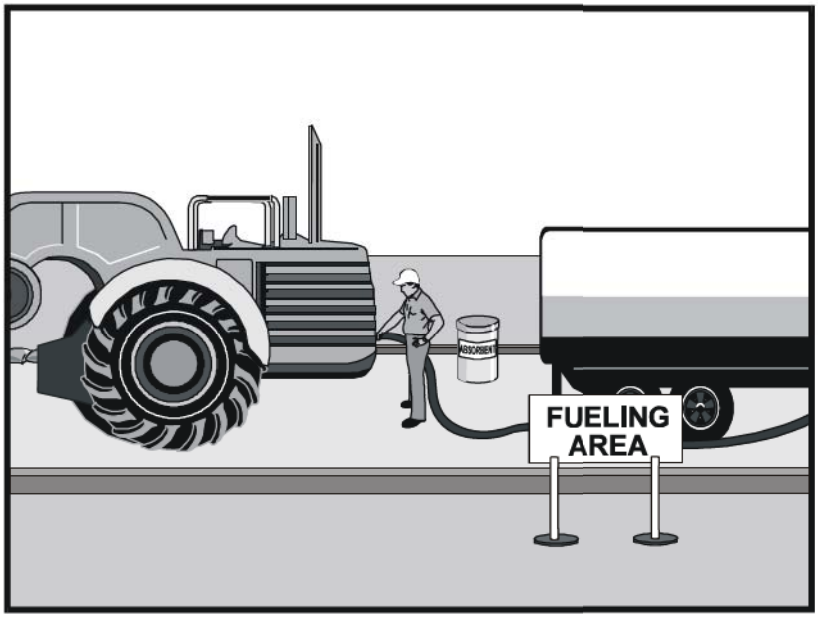
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Vehicle and Equipment Fueling NS-9



Objectives

EC	Erosion Control	
SE	Sediment Control	
TR	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Suitable Applications

These procedures are suitable on all construction sites where vehicle and equipment fueling takes place.

Limitations

Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Sending vehicles and equipment offsite should be done in conjunction with TR-1, Stabilized Construction Entrance/ Exit.

Implementation

- Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate fueling area at a site.
- Discourage "topping-off" of fuel tanks.

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- Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use.
- Drip pans or absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
- Use absorbent materials on small spills. Do not hose down or bury the spill. Remove the adsorbent materials promptly and dispose of properly.
- Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and large excavators, most vehicles should be able to travel to a designated area with little lost time.
- Train employees and subcontractors in proper fueling and cleanup procedures.
- When fueling must take place onsite, designate an area away from drainage courses to be used. Fueling areas should be identified in the SWPPP.
- Dedicated fueling areas should be protected from stormwater runon and runoff, and should be located at least 50 ft away from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.
- Protect fueling areas with berms and dikes to prevent runon, runoff, and to contain spills.
- Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended.
- Use vapor recovery nozzles to help control drips as well as air pollution where required by Air Quality Management Districts (AQMD).
- Federal, state, and local requirements should be observed for any stationary above ground storage tanks.

Costs

- All of the above measures are low cost except for the capital costs of above ground tanks that meet all local environmental, zoning, and fire codes.

Inspection and Maintenance

- Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site.
- Keep ample supplies of spill cleanup materials onsite.
- Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.

References

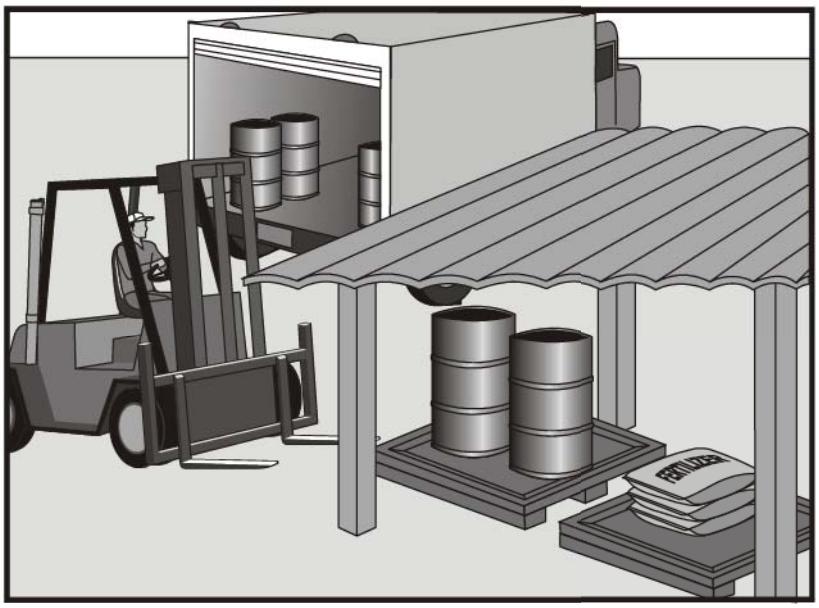
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance, Working Group Working Paper; USEPA, April 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Material Delivery and Storage WM-1



Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

This best management practice covers only material delivery and storage. For other information on materials, see WM-2, Material Use, or WM-4, Spill Prevention and Control. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

These procedures are suitable for use at all construction sites with delivery and storage of the following materials:

- Soil stabilizers and binders
- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and concrete components

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- Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

Limitations

- Space limitation may preclude indoor storage.
- Storage sheds often must meet building and fire code requirements.

Implementation

The following steps should be taken to minimize risk:

- Temporary storage area should be located away from vehicular traffic.
- Material Safety Data Sheets (MSDS) should be supplied for all materials stored.
- Construction site areas should be designated for material delivery and storage.
- Material delivery and storage areas should be located near the construction entrances, away from waterways, if possible.
  - Avoid transport near drainage paths or waterways.
  - Surround with earth berms. See EC-9, Earth Dikes and Drainage Swales.
  - Place in an area which will be paved.
- Storage of reactive, ignitable, or flammable liquids must comply with the fire codes of your area. Contact the local Fire Marshal to review site materials, quantities, and proposed storage area to determine specific requirements. See the Flammable and Combustible Liquid Code, NFPA30.
- An up to date inventory of materials delivered and stored onsite should be kept.
- Hazardous materials storage onsite should be minimized.
- Hazardous materials should be handled as infrequently as possible.
- During the rainy season, consider storing materials in a covered area. Store materials in secondary containments such as earthen dike, horse trough, or even a children's wading pool for non-reactive materials such as detergents, oil, grease, and paints. Small amounts of material may be secondarily contained in "bus boy" trays or concrete mixing trays.
- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and, when possible, in secondary containment.

- If drums must be kept uncovered, store them at a slight angle to reduce ponding of rainwater on the lids to reduce corrosion. Domed plastic covers are inexpensive and snap to the top of drums, preventing water from collecting.
- Chemicals should be kept in their original labeled containers.
- Employees and subcontractors should be trained on the proper material delivery and storage practices.
- Employees trained in emergency spill cleanup procedures must be present when dangerous materials or liquid chemicals are unloaded.
- If significant residual materials remain on the ground after construction is complete, properly remove materials and any contaminated soil. See WM-7, Contaminated Soil Management. If the area is to be paved, pave as soon as materials are removed to stabilize the soil.

Material Storage Areas and Practices

- Liquids, petroleum products, and substances listed in 40 CFR Parts 110, 117, or 302 should be stored in approved containers and drums and should not be overfilled. Containers and drums should be placed in temporary containment facilities for storage.
- A temporary containment facility should provide for a spill containment volume able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest container within its boundary, whichever is greater.
- A temporary containment facility should be impervious to the materials stored therein for a minimum contact time of 72 hours.
- A temporary containment facility should be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be collected and placed into drums. These liquids should be handled as a hazardous waste unless testing determines them to be non-hazardous. All collected liquids or non-hazardous liquids should be sent to an approved disposal site.
- Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.
- Incompatible materials, such as chlorine and ammonia, should not be stored in the same temporary containment facility.
- Throughout the rainy season, each temporary containment facility should be covered during non-working days, prior to, and during rain events.
- Materials should be stored in their original containers and the original product labels should be maintained in place in a legible condition. Damaged or otherwise illegible labels should be replaced immediately.

- Bagged and boxed materials should be stored on pallets and should not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials should be covered during non-working days and prior to and during rain events.
- Stockpiles should be protected in accordance with WM-3, Stockpile Management.
- Materials should be stored indoors within existing structures or sheds when available.
- Proper storage instructions should be posted at all times in an open and conspicuous location.
- An ample supply of appropriate spill clean up material should be kept near storage areas.
- Also see WM-6, Hazardous Waste Management, for storing of hazardous materials.

Material Delivery Practices

- Keep an accurate, up-to-date inventory of material delivered and stored onsite.
- Arrange for employees trained in emergency spill cleanup procedures to be present when dangerous materials or liquid chemicals are unloaded.

Spill Cleanup

- Contain and clean up any spill immediately.
- Properly remove and dispose of any hazardous materials or contaminated soil if significant residual materials remain on the ground after construction is complete. See WM-7, Contaminated Soil Management.
- See WM-4, Spill Prevention and Control, for spills of chemicals and/or hazardous materials.

Cost

- The largest cost of implementation may be in the construction of a materials storage area that is covered and provides secondary containment.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Keep an ample supply of spill cleanup materials near the storage area.
- Keep storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

References

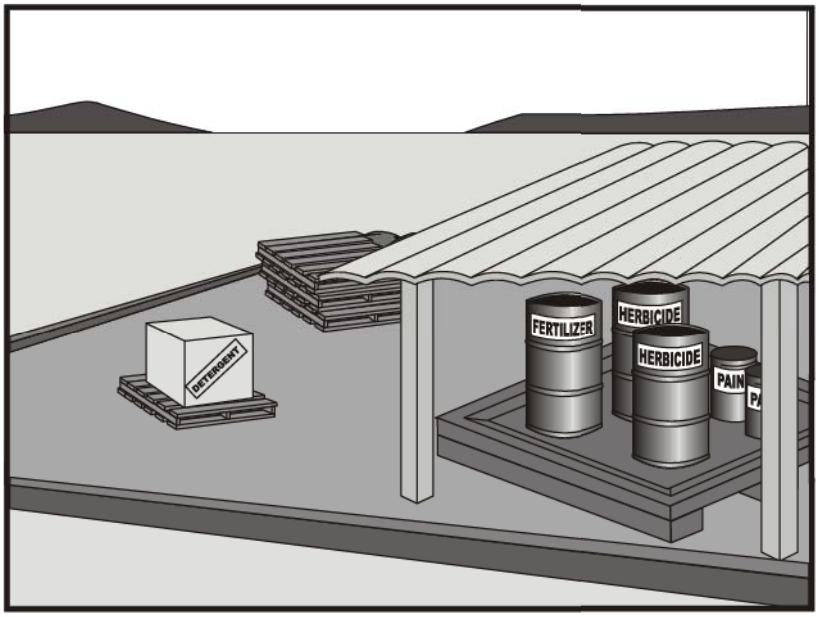
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance, Working Group Working Paper; USEPA, April 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Material Use WM-2



Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for use at all construction projects. These procedures apply when the following materials are used or prepared onsite:

- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and other concrete components
- Other hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

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Limitations

Safer alternative building and construction products may not be available or suitable in every instance.

Implementation

The following steps should be taken to minimize risk:

- Minimize use of hazardous materials onsite.
- Follow manufacturer instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Train personnel who use pesticides. The California Department of Pesticide Regulation and county agricultural commissioners license pesticide dealers, certify pesticide applicators, and conduct onsite inspections.
- Do not over-apply fertilizers, herbicides, and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful. Unless on steep slopes, till fertilizers into the soil rather than hydro seeding. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried offsite by runoff. Do not apply these chemicals just before it rains.
- Train employees and subcontractors in proper material use.
- Supply Material Safety Data Sheets (MSDS) for all materials.
- Dispose of latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, with other construction debris.
- Do not remove the original product label; it contains important safety and disposal information. Use the entire product before disposing of the container.
- Mix paint indoors or in a containment area. Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain, or watercourse. Dispose of any paint thinners, residue, and sludge(s) that cannot be recycled, as hazardous waste.
- For water-based paint, clean brushes to the extent practicable, and rinse to a drain leading to a sanitary sewer where permitted, or into a concrete washout pit or temporary sediment trap. For oil-based paints, clean brushes to the extent practicable, and filter and reuse thinners and solvents.
- Use recycled and less hazardous products when practical. Recycle residual paints, solvents, non-treated lumber, and other materials.
- Use materials only where and when needed to complete the construction activity. Use safer alternative materials as much as possible. Reduce or eliminate use of hazardous materials onsite when practical.

- Require contractors to complete the "Report of Chemical Spray Forms" when spraying herbicides and pesticides.
- Keep an ample supply of spill clean up material near use areas. Train employees in spill clean up procedures.
- Avoid exposing applied materials to rainfall and runoff unless sufficient time has been allowed for them to dry.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two–week intervals in the non-rainy season to verify continued BMP implementation.
- Maintenance of this best management practice is minimal.
- Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance, Working Group Working Paper; USEPA, April 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Stockpile Management WM-3

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Stockpile Management procedures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub base or pre-mixed aggregate, asphalt minder (so called "cold mix" asphalt), and pressure treated wood.

Suitable Applications

Implement in all projects that stockpile soil and other materials.

Limitations

None identified.

Implementation

Protection of stockpiles is a year-round requirement. To properly manage stockpiles:

- Locate stockpiles a minimum of 50 ft away from concentrated flows of stormwater, drainage courses, and inlets.
- Protect all stockpiles from stormwater runon using a temporary perimeter sediment barrier such as berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale barriers.

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- Implement wind erosion control practices as appropriate on all stockpiled material. For specific information, see WE-1, Wind Erosion Control.
- Manage stockpiles of contaminated soil in accordance with WM-7, Contaminated Soil Management.
- Place bagged materials on pallets and under cover.

Protection of Non-Active Stockpiles

Non-active stockpiles of the identified materials should be protected further as follows:

Soil stockpiles

- During the rainy season, soil stockpiles should be covered or protected with soil stabilization measures and a temporary perimeter sediment barrier at all times.
- During the non-rainy season, soil stockpiles should be covered or protected with a temporary perimeter sediment barrier prior to the onset of precipitation.

Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub base

- During the rainy season, the stockpiles should be covered or protected with a temporary perimeter sediment barrier at all times.
- During the non-rainy season, the stockpiles should be covered or protected with a temporary perimeter sediment barrier prior to the onset of precipitation.

Stockpiles of "cold mix"

- During the rainy season, cold mix stockpiles should be placed on and covered with plastic or comparable material at all times.
- During the non-rainy season, cold mix stockpiles should be placed on and covered with plastic or comparable material prior to the onset of precipitation.

Stockpiles/Storage of pressure treated wood with copper, chromium, and arsenic or ammonical, copper, zinc, and arsenate

- During the rainy season, treated wood should be covered with plastic or comparable material at all times.
- During the non-rainy season, treated wood should be covered with plastic or comparable material at all times and cold mix stockpiles should be placed on and covered with plastic or comparable material prior to the onset of precipitation.

Protection of Active Stockpiles

Active stockpiles of the identified materials should be protected further as follows:

- All stockpiles should be protected with a temporary linear sediment barrier prior to the onset of precipitation.
- Stockpiles of "cold mix" should be placed on and covered with plastic or comparable material prior to the onset of precipitation.

Costs

All of the above are low cost measures.

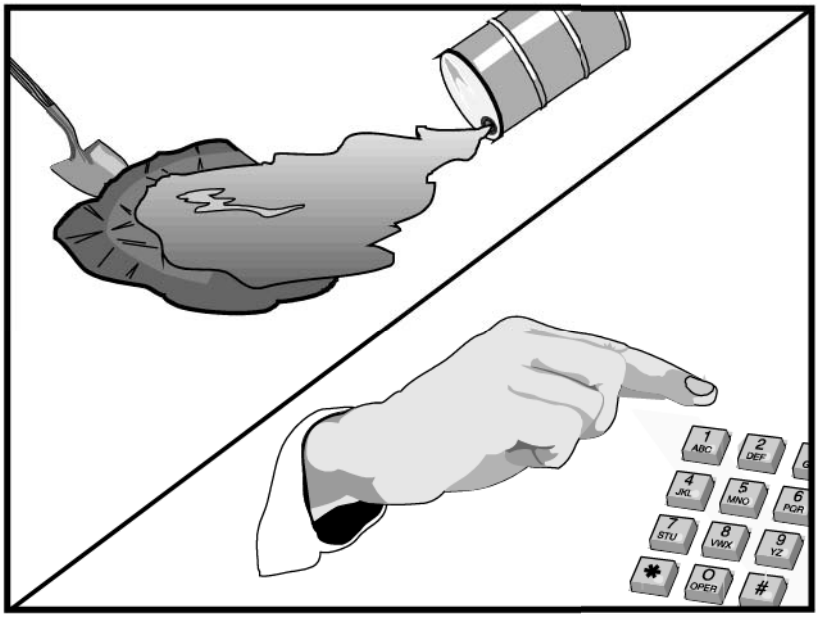
Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation
- Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Spill Prevention and Control WM-4



Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, WM-1, Materials Delivery and Storage, and WM-2, Material Use, also contain useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

This BMP is suitable for all construction projects. Spill control procedures are implemented anytime chemicals or hazardous substances are stored on the construction site, including the following materials:

- Soil stabilizers/binders
- Dust palliatives
- Herbicides
- Growth inhibitors
- Fertilizers
- Deicing/anti-icing chemicals

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- Fuels
- Lubricants
- Other petroleum distillates

Limitations

- In some cases it may be necessary to use a private spill cleanup company.
- This BMP applies to spills caused by the contractor and subcontractors.
- Procedures and practices presented in this BMP are general. Contractor should identify appropriate practices for the specific materials used or stored onsite

Implementation

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.
- Do not bury or wash spills with water.

- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with WM-10, Liquid Waste Management.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
  - Contain the spread of the spill.
  - Recover spilled materials.
  - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

- Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

- Spills should be cleaned up immediately:
  - Contain spread of the spill.
  - Notify the project foreman immediately.
  - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
  - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
  - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
  - Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
  - Notify the Governor's Office of Emergency Services Warning Center, (916) 845-8911.
  - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
  - Notification should first be made by telephone and followed up with a written report.
  - The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
  - Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Public Works Department, the Coast Guard, the Highway Patrol, the City/County Police Department, Department of Toxic Substances, California Division of Oil and Gas, Cal/OSHA, etc.

Reporting

- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- Federal regulations require that any significant oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hours).

Use the following measures related to specific activities:

Vehicle and Equipment Maintenance

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Place drip pans or absorbent materials under paving equipment when not in use.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- If fueling must occur onsite, use designate areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- Discourage "topping off" of fuel tanks.
- Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Costs

Prevention of leaks and spills is inexpensive. Treatment and/ or disposal of contaminated soil or water can be quite expensive.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

- Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas.
- Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.

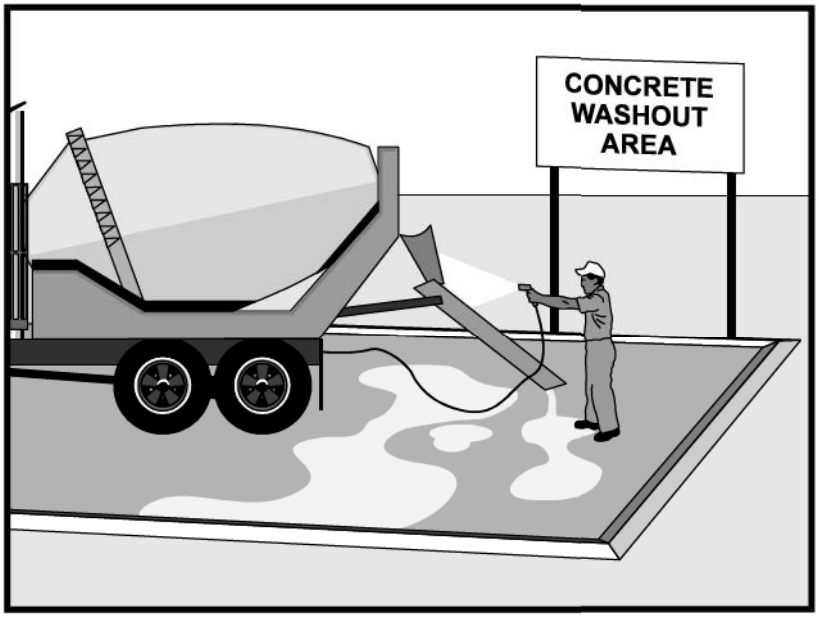
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Concrete Waste Management WM-8



Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	☑
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employee and subcontractors.

Suitable Applications

Concrete waste management procedures and practices are implemented on construction projects where:

- Concrete is used as a construction material or where concrete dust and debris result form demolition activities
- Slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from saw cutting, coring, grinding, grooving, and hydro-concrete demolition
- Concrete trucks and other concrete-coated equipment are washed onsite
- Mortar-mixing stations exist
- See also NS-8, Vehicle and Equipment Cleaning

Limitations

- Offsite washout of concrete wastes may not always be possible.

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Implementation

The following steps will help reduce stormwater pollution from concrete wastes:

- Discuss the concrete management techniques described in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.
- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks offsite or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
- For onsite washout:
  - Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
  - Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.
- Avoid creating runoff by draining water to a bermed or level area when washing concrete to remove fine particles and expose the aggregate.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.

Education

- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
- Arrange for contractor's superintendent or representative to oversee and enforce concrete waste management procedures.

Concrete Slurry Wastes

- PCC and AC waste should not be allowed to enter storm drains or watercourses.
- PCC and AC waste should be collected and disposed of or placed in a temporary concrete washout facility.
- A sign should be installed adjacent to each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities.

- Below grade concrete washout facilities are typical. Above grade facilities are used if excavation is not practical.
- A foreman or construction supervisor should monitor onsite concrete working tasks, such as saw cutting, coring, grinding and grooving to ensure proper methods are implemented.
- Saw-cut PCC slurry should not be allowed to enter storm drains or watercourses. Residue from grinding operations should be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue should not be allowed to flow across the pavement and should not be left on the surface of the pavement. See also NS-3, Paving and Grinding Operations; and WM-10, Liquid Waste Management.
- Slurry residue should be vacuumed and disposed in a temporary pit (as described in OnSite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures, below) and allowed to dry. Dispose of dry slurry residue in accordance with WM-5, Solid Waste Management.

Onsite Temporary Concrete Washout Facility, Transit Truck Washout Procedures

- Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking.
- A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Temporary concrete washout facilities should be constructed above grade or below grade at the option of the contractor. Temporary concrete washout facilities should be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
- Temporary washout facilities should have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Washout of concrete trucks should be performed in designated areas only.
- Only concrete from mixer truck chutes should be washed into concrete wash out.
- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed of offsite.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of per WM-5, Solid Waste Management. Dispose of hardened concrete on a regular basis.
- Temporary Concrete Washout Facility (Type Above Grade)
  - Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and

minimum width of 10 ft, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations.

- Straw bales, wood stakes, and sandbag materials should conform to the provisions in SE-9, Straw Bale Barrier.
- Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

- Temporary Concrete Washout Facility (Type Below Grade)
  - Temporary concrete washout facilities (type below grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and minimum width of 10 ft. The quantity and volume should be sufficient to contain all liquid and concrete waste generated by washout operations.
  - Lath and flagging should be commercial type.
  - Plastic lining material should be a minimum of 10 mil polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

Removal of Temporary Concrete Washout Facilities

- When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of.
- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Costs

All of the above are low cost measures.

Inspection and Maintenance

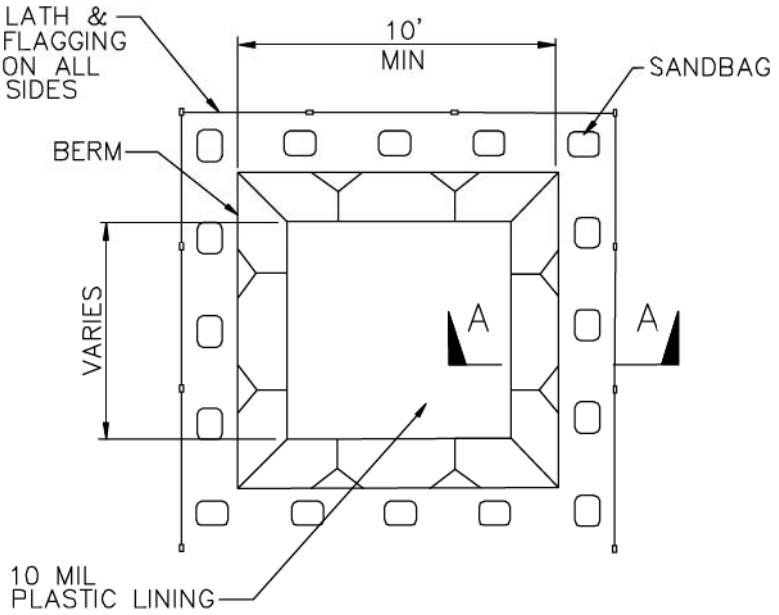
- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 in. for above grade facilities and 12 in. for below grade facilities. Maintaining temporary concrete washout facilities should include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials should be removed and disposed of.
- Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.

References

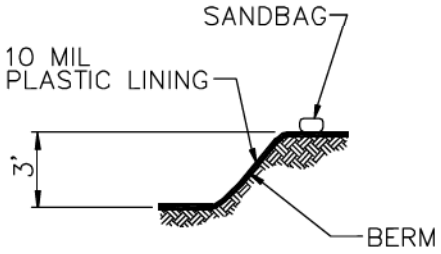
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

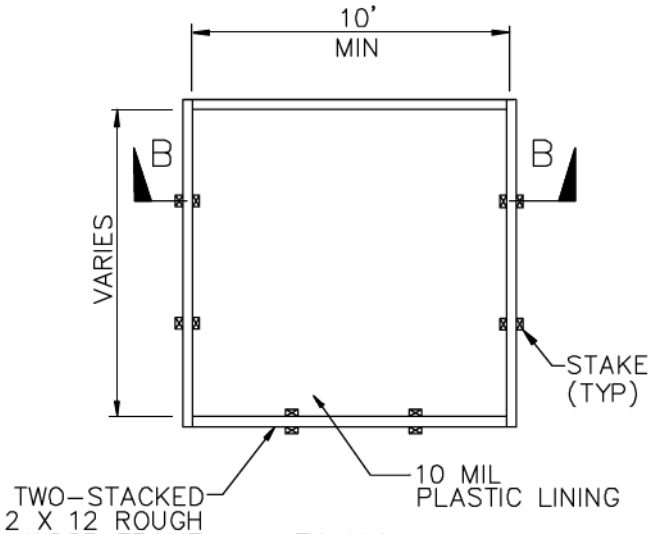
Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.



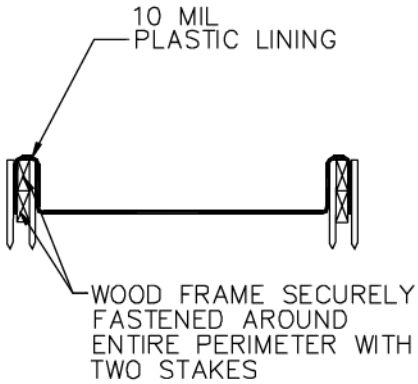
PLAN
NOT TO SCALE
TYPE "BELOW GRADE"



SECTION A–A
NOT TO SCALE



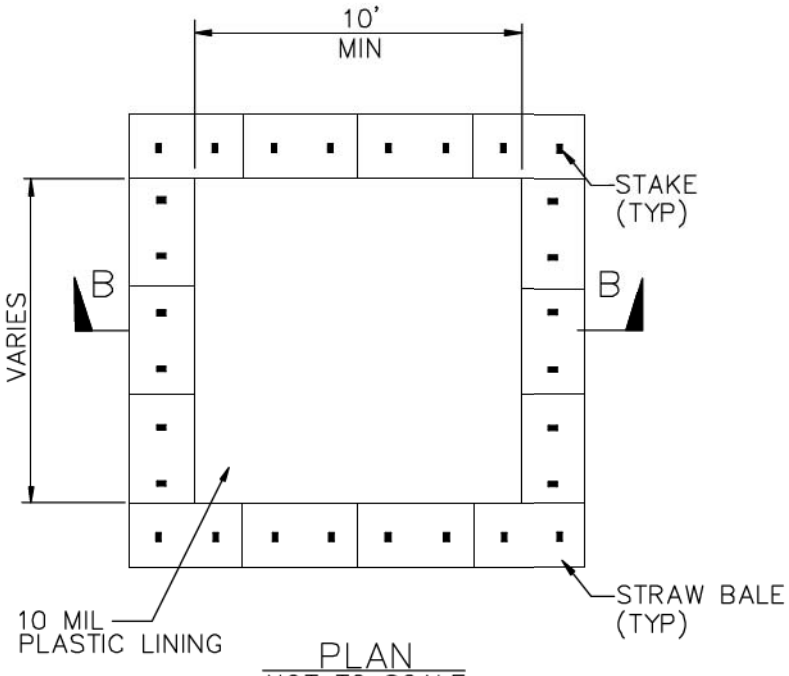
PLAN
NOT TO SCALE
TYPE "ABOVE GRADE"



SECTION B–B
NOT TO SCALE

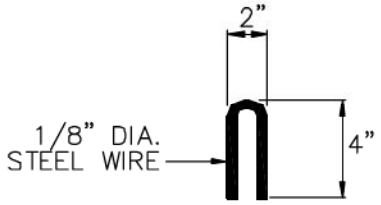
NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

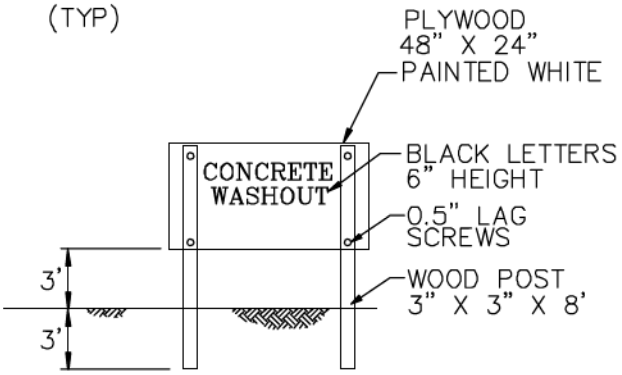


PLAN
NOT TO SCALE

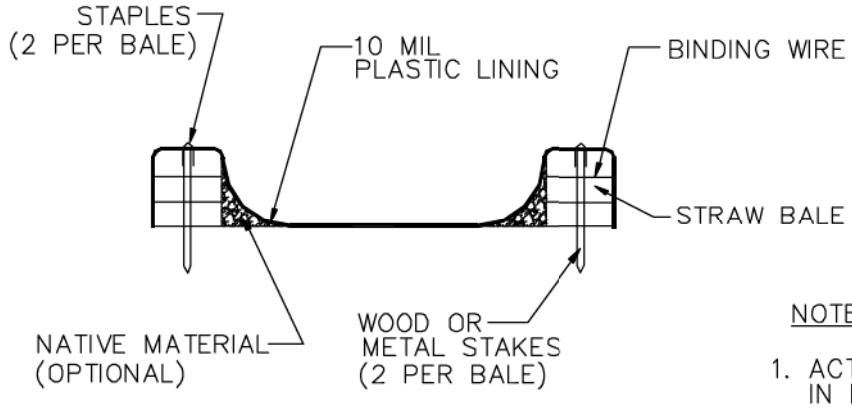
TYPE "ABOVE GRADE"
WITH STRAW BALES



STAPLE DETAIL



CONCRETE WASHOUT
SIGN DETAIL
(OR EQUIVALENT)



SECTION B–B
NOT TO SCALE

NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

APPENDIX C

Grading and Stabilization Record

Grading and Stabilization Record

To be completed with every inspection (every 7 days and within 24 hours of a rainfall event of 0.5 inch or more)

Inspector: _____ **Date:** _____

Amount of last rainfall: _____inches Duration of last rainfall: _____min/hrs/days (Circle Applicable Units)

Area Description	Date Since Last Disturbed	Date of Next Disturbance ("active" for areas under construction)	Stabilized (Yes/No)	Temporary or Permanent?	Stabilized With	Condition (good, fair, poor)	Stabilization Required On/Before Date

Referred for Stabilization:

Area: _____ Responsible Party: Date Completed: _____ Date
Area: _____ Responsible Party: Completed: _____ Date
Area: _____ Responsible Party: _____ Completed: _____

APPENDIX D

Spill Report

Spill Report

1. Date: _____ Location: _____

   Type of Material: _____ Quantity of Material: _____ Source of Spill: _____ Reason for Spill: _____ Amount of Material Recovered: _____ Material Still Exposed to Storm Water? _____

   Preventive Measures Taken: _____

   _____

   _____

   Signature: _____

2. Date: _____ Location: _____

   Type of Material: _____

   Quantity of Material: _____

   Source of Spill: _____

   Reason for Spill: _____

   Amount of Material Recovered: _____

   Material Still Exposed to Storm Water? _____

   Preventive Measures Taken: _____

   _____

   _____

   Signature: _____

APPENDIX E

Appendix E-1 Construction Site Inspection Log

Appendix E-3 Compliance Evaluation Report

Appendix E-1: Construction Site Inspection Log

General Information				
Project Name	Residences At Morning Vista			
Complete TRACS No.				
Inspection Subarea				
Contractor				
Inspector's Name				
Inspector's Title				
Signature				
Date of Inspection				
Inspection Type (Check Applicable)	☐ 14-Day Inspection		☐ Weekly Inspection	
	☐ Rainfall Event Inspection ☐ Prior to forecast rain ☐ 24-hr intervals during extended rain ☐ After a rain event		☐ Other _____	
Season (Check Applicable)	☐ **Rainy** (July 1st through September 30th and perhaps, December 1st through February 28th)		☐ **Non-Rainy** (October 1st through June 30th)	
Storm[1] Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

Project Area Summary and Disturbed Soil Size Limits			
Total Project Area			Acres
Field Estimate of Inactive Disturbed Soil Limits			Acres
Field Estimate of Active Disturbed Soil Limits			Acres
Field Estimate of Area with Temporary Stabilization			Acres
Field Estimate of Area Meeting Final Stabilization Requirements			Acres

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
1.0	**General**				
1.1	Is there a functional rain gauge accurate to 0.10 inch of rainfall installed for this project? [104.09 Stored Specifications]				
1.2	Are there adequate supplies of erosion and sediment control materials on-site to allow for timely BMP repair and installation? [Oregon DOT]				
2.0	**Site Perimeter Control**				
2.1	Have all upslope diversions of run-on water (crown ditches, berms, etc.) been installed prior to site disturbance? [E&PCM] [2]				
2.2	Are discharge points, discharge flows and/or downstream locations free from noticeable pollutants? [Part IV.H.4-AZCGP]				
2.3	Are discharge points and/or downstream locations free of any significant erosion or sediment transport? [Part IV.H.4-AZCGP]				
3.0	**Preservation of Existing Vegetation**				
3.1	Is temporary fencing or barricade provided to preserve vegetation or mark sensitive areas where no construction activity is planned? [E&PCM 5.1.2]				
3.2	Has the contractor started grading without installing BMPs that have been accepted by the Engineer? [104.09 Stored Specifications]				
4.0	**Soil Stabilization**				
4.1	Did stabilization occur within 14 days in the portion of the site where construction activities have temporarily or permanently ceased? [104.09 Stored Specifications]				
4.2	Does the applied temporary soil stabilization provide 100% coverage for the required areas? [Special Provision 805]				
4.3	Is there any evidence of erosion on cut or fill slopes or in roadside ditches? [E&PCM AZPDES Checklist]				
4.4	Are there any non-vegetated areas that may require temporary soil stabilization? [104.09 Stored Specifications and AZCGP]				
4.5	Is the area where temporary soil stabilization required free from visible erosion? [104.09 Stored Specifications and AZCGP]				
4.6	Are erosion control blankets overlapped a minimum of 6 inches with the upstream end on top? [E&PCM 5.1.8]				

[2] E&PCM is the ADOT *Erosion and Pollution Control Manual.*

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
4.7	Are erosion control blankets products using wheat straw certified to be free of noxious weeds by the Arizona Crop Improvements Association or the North American Weed Management Association? [E&PCM 5.1.8]				
4.8	Has tillage onslopes constructed steeper than 3:1 taken place prior to permanent re-vegetation? [Special Provision 805]				
4.9	Was compost/mulch applied in accordance with the seeding specifications? [E&PCM 5.1.4, 5.1.7 and 5.1.9]				
4.10	Was the tackifier applied in accordance with the seeding specifications? [Special Provision 805]				
4.11	Are there any BMPs called for on the SWPPP that are either not installed or installed improperly? [AZCGP]				
4.12	Do any seeded or landscaped areas require maintenance, irrigation, fertilization, or mulching? [Special Provision 805]				
4.13	When site inspections identify BMPs and other protection measures that are not functioning properly, they are field adjusted to fit site conditions within 4 calendar days or by the next anticipated storm event. [104.09 (F) (2) Stored Specifications]				
5.0	**Grading/Slopes**				
5.1	Is the grading plan being followed? [802 Stored Specifications]				
5.2	Are steeper slopes being prioritized for early stabilization (refer to Appendix B-1 and the site map)?				
5.3	Is fill free of any large rocks or vegetation? [Standard Specifications 203 and 803]				
5.4	Have downdrains been installed properly? [E&PCM 5.2.5]				
5.5	Have check dams been installed properly? [E&PCM 5.3.4]				
5.6	Is erosion rilling present? Is sediment from erosion being captured? [AZCGP, Part IV.D.5; combination of sediment and erosion control measures is required]				
5.7	Are the slopes being left roughened (mini-benching, etc.) after final tillage with fertilizer and compost incorporated before seeding? [E&PCM 5.1.3]				
5.8	Are the slopes being permanently finished and seeded from the top down? [E&PCM 5.1.3 and plan details]				
5.9	Are waste piles protected from run-on, run-off from adjacent areas and from winds? [E&PCM 5.7.5]				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
6.0	**Sediment Control (Cut and Fill Transition Areas)**				
6.1	Are silt fences properly installed with the geotextile at the bottom of the fence and buried a minimum of 6 inches into the ground and a minimum of 20 linear inches? [E&PCM 5.3.2]				
6.2	Is the built-up sediment less than one-third the height of the silt fence barrier? [E&PCM 5.3.2]				
6.3	Are sediment logs installed per the plan details and secured with 1 inch x 1 inch x 46 inches hardwood stakes driven to specific depth, placed on typical 2 foot centers? [E&PCM 5.3.6]				
6.4	Are sediment logs installed in drainage channel bottoms perpendicular to the flow of water, continuing up the channel side slope a minimum 2 feet above the high water flow line? [810-3.06 (A) Stored Specifications]				
6.5	Rock mulch (gradation C) tamped against both sides of sediment logs to assure that water is forced through the log rather than under it? [810-3.06 (A) Stored Specifications]				
6.6	Are sediment wattles installed along parallel contours (level) across the slope secured with wooden stakes driven 12 inches into undisturbed soil? [E&PCM 5.3.5]				
6.7	Are fiber rolls, when used, installed and maintained in accordance with manufacturer's instructions, or as directed by the Engineer? [810-3.06(C) Stored Specifications]				
6.8	Are sediment control berms properly constructed (height and compaction) at specific locations? [E&PCM 5.3.1]				
6.9	Is rock riprap/rock mulch for cut and fill transitions within the recovery/clear zone, 4 inches or larger, embedded into the finished grade so that any portion of the rock above grade will be less than 4 inches in height? [E&PCM 5.2.2]				
7.0	**Desilting Basins/Sediment Traps** [E&PCM 5.3.3]				
7.1	Are basins and traps constructed according to plan for the designed capacity?				
7.2	Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) installed and in working order?				
7.3	Is sediment accumulated in traps, check dams, or sedimentation basins removed when design capacity has been reduced by one-third?				
8.0	**Stockpiles** [E&PCM 5.7.3]				
8.1	Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
8.2	Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
8.3	Are stockpiles located away from concentrated flows of storm water, drainage courses, and inlets?				
8.4	Are required covers and/or perimeter controls in place?				
9.0	**Concentrated Flows/Structures**				
9.1	Are concentrated flow paths free of visible erosion? [E&PCM 5.2]				
9.2	Are storm drain inlets and outlets internal to the project properly protected and maintained? [E&PCM 5.2.4]				
9.3	Is rock riprap/rock mulch material angular in shape for pipe inlet and outlet protection, headwall, and wing wall treatment and check dams? [810-2.03 Stored Specifications]				
9.4	Are sand bags adjacent to curbs and catch basins 2 inches below the top of the curb to allow for drainage into the catch basin? [Plan details and 810-3.04 Stored Specifications]				
9.5	Are slope down drains properly maintained with no obstructions? [E&PCM 5.2.5]				
9.6	Has all stored material been removed from washes prior to the rainy season? [104.09 Stored Specifications]				
9.7	Have temporary conveyances been designed to accommodate the 10 year storm event if to remain in place for up to a 1-year period? [104.09 (E) Stored Specifications]				
9.8	Has any direct discharge of sediment into a water course been corrected by the end of the same day or work shift in which the inflow is observed. [104.09(F)(2) Stored Specifications]				
10.0	**Tracking Control** [E&PCM 5.5.1 and 5.5.2]				
10.1	Are points of ingress/egress to public/private roads inspected, swept, and/or vacuumed daily?				
10.2	Are all paved areas free of visible sediment tracking or other particulate matter?				
10.3	Are on-site and off-site tracking control devices used and maintained in addition to sweeping all entrances/exits to paved roadways related to hauling activities? [104.09 (E) Stored Specifications]				
10.4	Is geotextile placed between aggregate and base material?				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
11.0	**Wind Erosion Control**				
11.1	Is dust control implemented in conformance with Section 207-1 of the Stored Specifications? [E&PCM 5.4.1]				
12.0	**Non–Storm Water Discharges**				
12.1	Is dewatering effluent either contained on-site or handled in conformance with the General permit issued by ADEQ? [E&PCM 5.6.2]				
12.2	Is treatment provided for dewatering effluent in accordance with BMP 5.6.2 of the E&PCM?				
12.3	Is there any evidence of illicit discharges or illegal dumping on the project site? [104.09 (E) Stored Specifications – Good Housekeeping]				
12.4	If yes, has the Engineer been notified?				
12.5	If there has been an unauthorized or non–storm water discharge, has it been immediately contained, cleaned up and documented in the SWPPP? [AZCGP]				
13.0	**Vehicle & Equipment Fueling, Cleaning, and Maintenance**				
13.1	Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material? [E&PCM 5.6.6, 5.6.7, and 5.6.8]				
13.2	Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas? [E&PCM 5.6.6, 5.6.7, and 5.6.8]				
13.3	If no, are drip pans used? [E&PCM 5.6.7, and 5.6.8]				
13.4	Are dedicated fueling, cleaning, and maintenance areas located at least 50 feet away from downstream drainage facilities and watercourses, and protected from run-on and run-off? [E&PCM 5.6.6, 5.6.7, and 5.6.8]				
13.5	Is wash water contained for infiltration/evaporation? [E&PCM 5.7.9]				
13.6	Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)? [E&PCM 5.6.6]				
13.7	On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired? [E&PM 5.6.8]				
13.8	Are repairs and parts storage confined to protected locations. [E&PCM – AZPDES Checklist]				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
14.0	**Waste Management & Materials Pollution Control**				
14.1	Are material storage areas and washout areas protected from run-on and run-off, and located at least 50 feet from concentrated flows and downstream drainage facilities? [E&PCM 5.7.1]				
14.2	Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies? [E&PCM 5.7.1]				
14.3	Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities? [E&PCM 5.7.1]				
14.4	Are bagged and boxed materials stored on pallets? [E&PCM 5.7.1]				
14.5	Are hazardous materials and wastes stored in appropriate, labeled containers? [E&PCM 5.7.1]				
14.6	Are temporary containment facilities free of spills and rainwater? [E&PCM 5.7.1]				
14.7	Are temporary containment facilities and bagged/boxed materials covered? [E&PCM 5.7.1]				
14.8	Are temporary concrete washout facilities designated and being used? [E&PCM 5.7.8]				
14.9	Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system? [E&PCM 5.7.8]				
14.10	Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations? [E&PCM 5.7.8]				
14.11	Are the concrete clean out areas contained in conformance with the SWPPP? [E&PCM 5.7.8]				
14.12	Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities? [E&PCM 5.7.8]				
14.13	Are spills from mobile equipment fueling and maintenance properly contained and cleaned up? [E&PCM 5.6.7]				
14.14	Is the site free of litter? [E&PCM 5.7.5 and 104.09 (E) Stored Specifications]				
14.15	Are trash receptacles provided in the Contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods? [E&PCM 5.7.5]				
14.16	Is litter from work areas within the construction limits of the project site collected and placed in watertight dumpsters? [E&PCM 5.7.5]				
14.17	Are waste management receptacles free of leaks? [E&PCM 5.7.5]				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
14.18	Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds? [E&PCM 5.7.5]				
14.19	Are waste management receptacles filled at or beyond capacity? [E&PCM 5.7.5]				
14.20	Are waste materials and debris dumped or stored in any wash channel or ditch? [E&PCM 5.7.5]				
15.0	**Spill Control and Response**				
15.1	Are there proper spill clean-up materials, and posted spill-reporting procedures for hazardous materials and wastes in open, conspicuous and accessible locations adjacent to storage areas? [E&PCM 5.7.4]				
15.1	Was ADEQ contacted within 24 hours of a spill of hazardous substance(s)? [E&PCM 5.7.4]				
15.2	Temporary Water Body Crossing or Encroachment [E&PCM 5.6.4]				
15.3	Does the project conform to the requirements of the 404 permit and/or 401 Certification? [E&PCM 1.2]				
15.4	Are areas within 100 feet of water features or sensitive areas stabilized within seven days of exposure? [Oregon DOT Recommendation]				
15.5	Are channels, streams, lakes, and reservoirs cleared of all falsework, piling, debris, or other obstructions resulting from the contractor's activities within 24 hours from the time it is discovered? [104.09 Stored Specifications]				
15.6	Is mechanical equipment operating in running streams? [104.09 (E) Stored Specifications]				
15.7	Are there any other potential non–storm water pollution control concerns at the site? [AZCGP, Parts I.C and IV.D.7]				
16.0	**SWPPP Update**				
16.1	Do the SWPPP, Project Schedule/Water Pollution Control Schedule adequately reflect the current site conditions and contractor operations? [104.09 (B) Stored Specifications]				
16.2	Are all BMPs shown on the plans installed in the proper location(s) and according to the details for the plan? [E&PCM, AZPDES Checklist and AZCGP IV.H.4]				
16.3	Is the Storm Water Pollution Plan located on-site where it is accessible to others? [E&PCM 3.4]				
16.4	Are both the contractors and ADOTs NOIs posted on the bulletin board? [E&PCM 3.4]				
16.5	Are the compliance Evaluation Reports current, complete, and included in the project SWPPP? [AZCGP]				

Site Inspection					
Requirement		**NA**	**Yes**	**No**	**Location/Improvements Recommended**
16.6	When site inspections identify problems that require additions or modifications to BMPs are revisions made to the SWPPP within seven (7) calendar days? [104.09(B) Stored Specifications]				
16.7	Whenever it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutant discharge in storm water or contributing to water quality exceedences, is the SWPPP amended within seven (7) calendar days. [104.09(B) Stored Specifications]				
16.8	Whenever any conditions are identified that significantly affect the discharge of pollutants to the waters of the United States that have not been previously addressed, are the SWPPP amended within seven (7) calendar days? [104.09(B) Stored Specifications]				

Appendix E-3: Compliance Evaluation Report

AZG2020-001 General Permit for Construction Activities
Operator's Compliance Evaluation Report

The general permit requires inspection of storm water pollution controls on a choice of frequency described in Part IV. H. Attach sheets if more space is needed.

Project: Residences At Morning Vista_____ **Date:** _____

Storm Start Date & Time: _____**Storm Duration (hrs):** _____

Time elapsed since last storm (Min. Hr. Days): _____

Approximate Rainfall Amount (mm): _____

Name & Title of Inspector: _____**, Project Manager**

Qualifications of Inspector: ☐ **Attached or** ☐ **In Section** _____**of the SWPPP.**

1. ☐ Periodic inspection or ☐ Rain event inspection; relevant weather information:

_____
_____
_____
_____

2. Location(s) of discharge from the site: ☐ None or ☐ Description:

_____
_____
_____
_____

3. Location(s) of and identification of BMPs that need to be maintained; failed to operate or proved to be inadequate: ☐ None or ☐ Description:

_____
_____
_____
_____

4. Locations where additional BMPs are needed: ☐ None or ☐ Description:

_____
_____
_____
_____

5. Corrective actions required including changes and target dates: ☐ None or ☐ Description:

_____
_____
_____
_____

6. Identify all sources of non–storm water and the associated pollution control measures: ☐ None or ☐ Description:

_____
_____
_____
_____

7. Identify material storage areas and evidence of, or potential for pollutant discharge from these areas: ☐ None or ☐ Description:

_____
_____
_____
_____

8. Identify any other apparent incidents of non-compliance: ☐ None or ☐ Description:

_____
_____
_____
_____

9. Have deficiencies been referred for corrective actions? ☐ Yes or ☐ No

   If not, provide projected date of referral. _____

Certification

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Signature: _____ Date: _____

Printed Name: _____

APPENDIX F

BMP Maintenance and Repair Documentation

BMP Maintenance and Repair Documentation

BMP Description	Location	Request for Maintenance/ Repair Date*	Nature of Maintenance/Repair	Date Maintenance/ Repair Completed/ Initials

* May include the date of inspection, routine maintenance date, or date capacity limit is reached if filled to more than one-third capacity.

APPENDIX G

Notice of Intent/ADEQ Authorization

NOI # 112688

ARIZONA DEPARTMENT
OF
ENVIRONMENTAL QUALITY

Notice of Intent (NOI) Approved

Coverage Authorization Letter

You are now authorized to discharge from construction activities under ADEQ's Stormwater AZPDES Construction Activities General Permit (CGP).

All laws and rules apply; see the copy of ADEQ's AZPDES CGP included in your approval email for details.

LTF#: **112688**
ID#: **AZC112688**
Issued: **08/29/2025**
Permit/Certificate Type: **NOI**
Expiration Date: **08/28/2030**

Coverage Issued to:

Name: **JEM DEVELOPMENT, LLC**
Address Line 1: **1795 E SKYLINE DR**
Address Line 2: **STE 193**
City: **TUCSON**
State: **AZ**

Zip: **85718**

Construction Site Information:

Site Name: **Residences at Morning Vista**

Location:

Lat: 32.45655 / Long: -110.97107

Acres Disturbed: **3.5**

Outfall Location(s):

DETENTION BASIN OUTFALL | 32.456579 | -110.970229 | Honey Bee Canyon

Discharge Monitoring Report (DMR) Required: **No**

SWPPP Contact Information:

First Name: **Christopher**

Last Name: **Itule**

Phone: **5205484321**

Work Email: **citule@dswcommercial.com**

Please note, that pursuant to Arizona Administrative Code, Title 18, Chapter 14, Article 109(C), you will be billed an annual permit fee, as described in Table 6, adjusted annually under subsection (D) until such time as you submit a Notice of Termination to close out your permit coverage.

You are authorized to operate under this Construction General Permit NOI. This authorization may be revoked in the event that you, the permittee, fails to comply with the general permit or has the potential to cause or contribute to the violation of a Protected Surface Water Quality Standard.

The NOI is not the permit; it acknowledges that ADEQ has authorized the operator to discharge stormwater, subject to the terms and conditions of this permit. Correspondence with ADEQ concerning any construction activity covered by this permit must reference the NOI authorization number.

If you have any questions regarding this Construction General Permit NOI, please contact the Stormwater Program at 602-771-1440.

APPENDIX H

Copy of the Arizona Construction General Permit

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

State of Arizona
Department of Environmental Quality
Water Quality Division
Phoenix, Arizona 85007

Arizona Pollutant Discharge Elimination System
General Permit for Stormwater Discharges Associated with Construction Activity to Protected Surface Waters

This permit provides authorization to discharge under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of the Arizona Revised Statutes (A.R.S.), Title 49, Chapter 2, Article 3.1; the Arizona Administrative Code (A.A.C.), Title 18, Chapter 9, Article 9, and Chapter 11, Article 1; and the Clean Water Act (CWA) as amended (33 U.S.C. 1251 *et seq*.).

This general permit specifically authorizes stormwater discharges of pollutants associated with construction activity to Protected Surface Waters in Arizona, pursuant to federal conditions in 40 CFR § 122.26(b)(14)(x) and 40 CFR § 122.26(b)(15) (WOTUS*)* and A.R.S. Title 49 Chapter 2, Article 3.1 *et seq*. (non-WOTUS). State requirements for discharges to non-WOTUS protected surface waters are adopted pursuant to A.R.S. § 49-255.04 and are enforceable solely by the Arizona Department of Environmental Quality (ADEQ). All discharges authorized by this general permit shall be consistent with the terms and conditions of this permit. Permit coverage is required from the "commencement of construction activities" until "final stabilization" as these terms are defined and described in this permit.

This general permit is effective on August 29, 2025.

This general permit and the authorization to discharge expire at midnight on August 28, 2030.

Signed on: 8/28/2025

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

DocuSigned by:
Josephine Maressa
A5AF6048FAC8426...

Josephine Maressa, Deputy Director
Water Quality Division

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1.0 COVERAGE UNDER THIS GENERAL PERMIT

1.1 Permit Area

This general permit covers the state of Arizona.

1.1.1 This permit is not authorized for use on sites with stormwater discharges associated with construction activities on any Tribal Lands in Arizona. Authorization for discharges on Tribal Lands must be obtained through U.S. EPA Region 9 or other appropriate authority.

1.1.2 This permit is not authorized for use on sites with stormwater discharges associated with construction activities on any federally owned sites designated as "Lands of Exclusive Federal Jurisdiction (LEFJ)." Authorization for discharges on LEFJ sites must be obtained through U.S. EPA Region 9.

1.2 Eligibility

1.2.1 This general permit authorizes the discharge of stormwater from construction activity to all waters on the protected surface waters list, including discharges to waters of the U.S. (WOTUS) and non-WOTUS protected surface waters. The requirements applicable to discharges to non-WOTUS protected surface waters are adopted pursuant to state law and are enforceable solely by ADEQ. See A.R.S. 49-221(G)(1).

1.2.2 This general permit authorizes stormwater discharges associated with "construction activities" to protected surface waters, either directly or by way of a conveyance, that will disturb one or more acres of land, or will disturb less than one acre of land that is part of a common plan of development or sale that will ultimately disturb one acre or more. See 40 CFR 122.26(b)(15)(ii) and Appendix A.

1.2.3 This general permit is also applicable to stormwater discharges associated with support activities from temporary plants or operations set up to produce concrete, asphalt, or other materials exclusively for the permitted construction activity. See 40 CFR 122.26(b)(14)(x) and (15) and Appendix A.

1.2.4 Operators of small construction sites (less than five (5) acres) may, if eligible, choose an Erosivity Waiver from coverage under this permit, provided that site remains in compliance with the applicable requirements of Part 1.6 during construction. See 40 CFR 122.26(b)(15) and Appendix A.

1.2.5 Coverage under this permit is not required for "routine maintenance" that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. See A.A.C. R18-9-A902(B)(8)(c)(iii) and Appendix A.

1.2.6 Coverage under this permit may be required for any other discharges associated with construction activities that ADEQ determines are needed in accordance with A.A.C. R18-9-A902(B)(8)(d).

1.2.7 Any discharges that are not consistent with the eligibility conditions of this permit are not authorized by this permit. An operator shall either apply for a separate Arizona Pollutant Discharge Elimination System (AZPDES) permit to cover such discharge(s), cease the discharge(s), or take necessary steps to make the discharge(s) eligible for coverage under this permit.

1.2.8 An operator who chooses to obtain an individual stormwater permit (in accordance with the requirements of A.A.C. R18-9-C902(B)), or is required by ADEQ to obtain an individual stormwater permit (in accordance with A.A.C. R18-9-C902(A)), shall comply with the requirements of Appendix B, Subsections 17 and 18(a)(i).

1.3 Authorized Discharges

Reclaimed water may be used for dust control, soil compaction, or landscape irrigation if a valid reuse permit is obtained and there are no discharges of reclaimed water off-site. Reclaimed Water Permits shall be obtained from ADEQ prior to start of construction. See the 2025 CGP Fact Sheet for more information.

1.3.1 Allowable Stormwater Discharges

a. Stormwater runoff associated with construction activities provided the discharge is conducted in compliance with this permit.

b. Discharges requiring a stormwater permit under 40 CFR 122.26(a)(1)(v); 40 CFR 122.26(b)(15)(ii); or under 40 CFR 122.26(a)(9).

c. Stormwater discharges from on or off-site construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided all of the following:

i. The support activity is exclusively related to a construction activity that is required to have AZPDES permit coverage for discharges of stormwater associated with construction activity.

ii. The support activity is not a commercial operation (serving multiple unrelated construction activities by different operators) and does not operate beyond the completion of the construction activity for which the support activity is directly associated.

iii. The support activity is not otherwise covered by a separate AZPDES permit.

iv. Stormwater control measures for the discharges from the support activity areas are identified in the Stormwater Pollution Prevention Plan (SWPPP) and implemented.

1.3.2 Allowable Non-Stormwater Discharges

a. The following are the only non-stormwater discharges allowed under this permit:

i. Discharges from emergency fire-fighting activities.

ii. Water used to control dust, provided reclaimed water or other process wastewaters are not discharged off site.

iii. Routine external building wash down, provided soaps, solvents, and detergents are not used.

iv. Water used to rinse vehicles and equipment, provided that reclaimed water or other wastewater is not discharged off site and no soaps, solvents, detergents, oils, grease or fuels are present in the rinsate.

v. Pavement rinse waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where soaps, solvents, and detergents are not used.

vi. Uncontaminated air conditioning or compressor condensate.

vii. Uncontaminated, non-turbid groundwater or spring water.

viii. Foundation or footing drains where flows are not contaminated with process materials such as solvents.

ix. Water from firefighting system testing and maintenance, including hydrant flushing.

x. Discharges related to installation and maintenance of potable water supply systems, including disinfection and flushing activities, discharges resulting from pressure releases or overflows, discharges due to potable water pipeline breaks and discharges from wells approved by ADEQ for drinking water use.

xi. Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater.

xii. Water used for compacting soil, provided reclaimed water or other wastewaters are not discharged off site

xiii. Water used for drilling and coring such as for evaluation of foundation materials, where flows are not contaminated with additives.

xiv. Uncontaminated waters obtained from dewatering operations/foundations in preparation for and during excavation and construction provided the discharge are managed as specified in Part 3.6 of this permit.

b. These discharges are allowed provided they are minimized to the extent practicable. When allowable non-stormwater discharges cannot be practicably eliminated, the operator shall install stormwater control measures to reduce or eliminate pollutants in the discharge to ensure compliance with Part 3 of this permit.

c. If the site is within 1/4 mile upstream of an Outstanding Arizona Water (OAW), the operator shall not discharge any non-stormwater under this permit, except for emergency fire-fighting activities, unless specifically authorized by ADEQ.

1.4 Prohibited Discharges

The operator shall not allow any non-storm water discharges from the site, except as provided in Part 1.3.2; all other non-stormwater discharges shall be eliminated or authorized under a separate AZPDES permit. Stormwater discharges that are co-mingled with non-stormwater, other than the allowable non-stormwater discharges listed in Part 1.3.2, are not eligible for coverage under this permit.

The following discharges are **prohibited**:

a. Wastewater from washout of concrete.

b. Wastewater from washout and/or cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by an appropriate control measure as described in Part 3.5.2.c.

c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

d. Soaps or solvents used in vehicle and equipment washing.

e. Toxic or hazardous substances from a spill or other release.

f. New or expanded point-source discharges directly to a WOTUS that is classified as an Outstanding Arizona Water (OAW) under A.A.C. R18-11-112.

1.5 Limitations of Coverage

1.5.1 Post-Construction Discharges: This general permit does not authorize stormwater discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity site, has achieved final stabilization and a Notice of Termination (NOT) has been submitted to ADEQ. Post-construction stormwater discharges from sites require coverage under a separate AZPDES permit.

1.5.2 Discharges Covered by Another AZPDES Permit: This general permit does not authorize stormwater discharges associated with construction activities that are covered under an individual permit or another applicable general permit.

1.5.3 Impaired or Not-Attaining Waters: The following conditions apply if outfalls from construction sites are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining:

a. The operator must submit an electronic copy of the Stormwater Pollution Prevention Plan (SWPPP) for ADEQ's review (which may take up to 30 calendar days) and pay the associated review fee with the Notice of Intent (NOI) to ADEQ in the myDEQ Permitting Portal. See Part 2.4 for fee information.

b. The SWPPP must include a Sampling and Analysis Plan (SAP) for analytical monitoring if there are discharges from the site that include the pollutant(s) for which the protected surface water is impaired or not-attaining. See Part 7.2.

However, if the operator can demonstrate there are no pollutants that will be an additional source to the impairment, analytical monitoring may not be required. As part of this demonstration, the operator must consider all on-site activities, including the presence of pollutants (e.g., metals, nutrients, etc.) in site soils. The demonstration must be included in the SWPPP submitted for ADEQ's review.

c. If a discharge contains pollutants for which an approved Total Maximum Daily Load (TMDL) has been established, the SWPPP shall specifically identify control measures necessary to ensure the discharges will be consistent with the provisions of the TMDL.

1.6 Erosivity Waivers for Small Construction Activities

An operator performing construction activities which disturb between one and five acres may be eligible for a waiver from coverage under this permit based on a low potential for soil erosion (i.e., the Erosivity Waiver).

Construction activities that disturb five acres or greater, or less than five acres but are part of a common plan of development or sale, are not eligible for the Erosivity Waiver.

Sites with outfalls that are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining, or an Outstanding Arizona Water (OAW), are not eligible for the Erosivity Waiver.

myDEQs Method of Calculating the Rainfall Erosivity (R) Factor

Low potential for erosion is defined as a rainfall erosivity (R) factor of less than five (5) and is calculated in myDEQ, which uses the EPA's methodology for determining if a site qualifies for the Erosivity Waiver, based on the *USDA Handbook 703-Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)*, dated January 1997. U.S. EPA has updated its Rainfall Erosivity Factor Calculator to correct known problems and to use updated data from the Natural Resources Conservation Service's (NRCS) Revised Universal Soil Loss Equation, Version 2 (RUSLE2) database. myDEQ is using the Version 2 for erosivity calculations for the 2025 CGP.

1.6.1 Obtaining an Erosivity Waiver

The operator shall submit a Notice of Intent (NOI) in myDEQ and obtain an Erosivity Waiver before commencing construction activities. An operator of a construction activity that is eligible based on criteria for an Erosivity Waiver shall provide the information required in Part 2.3, Submitting an NOI, in the myDEQ Permitting Portal. myDEQ will determine if the site is eligible for this waiver and if so, allow the operator to choose the waiver or continue with a standard NOI. Operators that are eligible for an Erosivity Waiver are not required to prepare and maintain a SWPPP.

1.6.2 Construction Activities That Extend Past Certified Period

The Erosivity Waiver includes the "end date" as calculated by myDEQ relative to the site information provided in the NOI. If construction activities continue past this "calculated end date," the operator shall:

a. Prepare a SWPPP.
b. Terminate the Erosivity Waiver in myDEQ.
c. Submit a NOI as required under parts 2.3 and 6.0.

2.0 AUTHORIZATION UNDER THIS GENERAL PERMIT

The operator shall review all the conditions and requirements of the permit, including the Standard Permit Conditions in Appendix B, before submitting any documentation described in Part 2.

2.1 Responsibilities of Operators

2.1.1 All operators are required to obtain coverage under this permit or an AZPDES permit for stormwater discharges associated with construction activity. For the purposes of this permit, an "operator" is any person associated with a construction activity that meets at least one of the following two criteria:

a. The person has operational control over construction plans and specifications, including the ability to revise those plans and specifications.

b. The person has day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).

Subcontractors are generally not considered to be "operators" for the purposes of this permit.

2.1.2 Where there are multiple operators associated with the same construction activity, all operators are required to obtain permit coverage. The following applies in these situations:

a. If one operator has control over plans and specifications and a different operator has control over activities at the construction site, they may divide responsibility for compliance with the terms of this permit as long as they jointly develop a common SWPPP (see Part 6.2), which documents which operator has responsibility for each requirement of the permit.

b. If an operator only has operational control over a portion of a larger construction site (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with applicable effluent limits (see Part 3), terms, and conditions of this permit as it relates to their activities on their portion of the construction site and implementation of control measures described in the SWPPP in the areas under their control.

c. Operators must ensure either directly or through coordination with other operators that their activities do not render another operator's control measures ineffective.

d. If the operator of a construction support activity (Part 1.3.1.c) is different from the operator of the main construction site, that operator is also required to obtain permit coverage.

2.2 Prerequisites for Submitting a Notice of Intent (NOI)

An operator may be authorized to discharge under this permit only if the stormwater discharge is associated with construction activities from a construction site. Prior to submission of an NOI, an applicant seeking authorization to discharge under this general permit shall:

2.2.1 Meet the eligibility requirements under Part 1.2.

2.2.2 Review the 2025 Construction General Permit.

2.2.3 Develop a Stormwater Pollution Prevention Plan (SWPPP) that meets the requirements of Part 6 of this permit, and that covers either the entire site or all portions of the site for which the person is an operator.

a. The SWPPP shall be prepared by a qualified person prior to submission of the NOI, and shall be implemented prior to the start of construction.

b. The SWPPP is not required to be submitted to ADEQ unless the construction site has one or more outfalls 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as an impaired, or not-attaining water, or an OAW, as described in Part 1.5.3. The SWPPP shall be retained and made available in accordance with Part 6.7.

2.3 Submitting an NOI

2.3.1 Application Required

a. The operator shall submit an accurate NOI in myDEQ for each construction activity that disturbs one (1) or more acres of land, and for each activity that is part of a common plan of development or sale that will ultimately disturb one (1) or more acres of land.

b. Submission of the NOI demonstrates the operator's intent to be covered by this permit; it is not a determination by ADEQ that the operator has met the eligibility requirements for the permit. Discharges are not authorized if ADEQ notifies the operator that further evaluation is necessary, or that the discharges are not eligible for coverage under this permit. See Part 2.3.3 for more information.

c. If the operator changes or another operator is added before construction activities have reached final stabilization in accordance with permit part 3.4, the new operator shall also submit an NOI to be authorized under this permit before taking over operational control or commencing construction activities at the site.

2.3.2 NOI Requirements

The NOI in myDEQ requires at a minimum, the following information:

a. The name, address, and telephone number of the construction site operator.

b. The type of construction activity (e.g., school, commercial, subdivision, roadway, etc.).

c. Whether the construction activity is part of a common plan of development or sale.

d. Estimates of the total construction site acreage and the acreage to be disturbed by the operator submitting the NOI.

e. The printed name (or other identifier), address, and county, of the construction site.

f. An accurate latitude and longitude (in decimal degree format to 6 decimal places) of the construction site at the point nearest to the closest protected surface water.

g. The latitude and longitude (in decimal degree format to 6 decimal places) of outfalls that may discharge stormwater to a protected surface water (See the definition of outfall in Appendix A).

h. Confirmation that a SWPPP meeting the requirements in Part 6 of this permit has been developed and will be implemented prior to commencement of construction activities.

i. If the NOI is a late application, the operator shall certify that a SWPPP has been developed and implemented prior to submittal of the NOI.

j. The name and telephone number of a contact person for the SWPPP.

k. The name of the closest protected surface water, which may include an unnamed wash, or canal.

l. The name(s) of the municipal separate storm sewer system (MS4) into which there is a potential to discharge, if applicable.

m. The construction activity's estimated start and completion dates.

n. Fees are to be paid using a credit card or electronic check (ACH-debit) at the time of NOI submission in myDEQ.

2.3.3 Authorization to Discharge under the AZPDES Construction General Permit (CGP)

Upon completion of the NOI application in myDEQ, the operator will receive a "AZPDES Construction General Permit (CGP) Authorization to Discharge" to download from myDEQ, assigning an authorization number and approval date. Correspondence with ADEQ concerning any construction activity covered by this permit shall reference the NOI authorization number.

a. Routine Coverage: Except as set forth in subsection (d) below, an eligible operator is authorized to discharge stormwater from a construction site after the NOI is submitted; the application fees are paid in myDEQ; and the operator has been issued an Authorization to Discharge.

b. Discharges to Impaired or Not-Attaining Waters or Outstanding Arizona Waters: Applicants seeking coverage for a construction site that has one or more outfalls within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining, or an OAW, are not authorized under this permit for 30-calendar days following submission of their Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), Sampling & Analysis Plan (SAP), and initial application fees in myDEQ.

ADEQ may notify operators within this time frame that the NOI is approved, or there is cause for a SWPPP amendment, or denial of coverage as specified in Part 1.5.3 of this permit. If notification is not received in the 30-calendar day time period, the operator is deemed covered under this permit.

Note: this condition does not apply for discharges to non-WOTUS protected surface waters.

c. Inaccurate NOI Submission: If ADEQ notifies the operator that a new or modified NOI is inaccurate, a new NOI may need to be submitted along with any applicable fee(s).

d. Inaccurate SWPPP Submission: If ADEQ notifies the operator that the SWPPP is incomplete or otherwise deficient, the operator shall submit a revised SWPPP to ADEQ that addresses the comments, if the operator still intends to obtain permit coverage. If review of the revised SWPPP reveals that a discharge of pollutants may cause or contribute to an exceedance of effluent limitations contained in this permit, monitoring may be required in accordance with Part 7. The revised SWPPP must include the applicable re-review fee. Permit coverage is suspended until ADEQ issues the NOI certificate.

e. Ongoing Construction Activities: Operators of ongoing construction activities that are in process, as of the effective date of this permit, must comply with the following within the first 60 calendar days from the effective date of the permit:

i. The operator shall review the 2025 CGP Permit to understand new permit conditions.

ii. The operator shall update the SWPPP as necessary to comply with the requirements of Part 6 of this permit.

iii. The operator shall submit a new NOI in myDEQ. The operator may continue to comply with the terms and conditions of the expired permit (AZG2020-001) until the NOI is submitted and payment is made for the permit application fee.

iv. If eligible, an operator may submit a Notice of Termination (NOT), if construction is finished and final stabilization has been achieved. See Part 2.6.1.

2.3.4 Late Applications: The operator is only permitted for eligible discharges that occur after an accurate NOI is submitted, the associated fees are paid in myDEQ, and authorization is granted. ADEQ reserves the right to take enforcement action for any un-permitted discharges or permit noncompliance that occur between the time construction commenced and authorization for coverage under the permit is granted or denied; or an Erosivity Waiver or No Discharge Certificate (NDC) is approved in myDEQ.

2.3.5 Change of Operator: If the operator of an active construction site changes, both the existing operator and new operator must implement the following, as applicable:

a. Existing Operator

i. The existing operator shall comply with the permit conditions specified in the general permit until the new Operator is issued an Authorization to Discharge in myDEQ.

ii. The existing operator shall submit a Notice of Termination (NOT) within 30-calendar

days after the new operator assumes responsibility for the site.

b. New Operator

i. The new operator shall develop a stormwater pollution prevention plan (SWPPP), or may modify, certify, and implement the existing SWPPP, if the existing plan complies with the requirements of the current general permit.

ii. The new operator shall submit a Notice of Intent (NOI) to ADEQ before taking over operational control of, or initiation of, activities at the site.

iii. The new operator shall submit a NOT in myDEQ, when:
1) The site ceases construction operations and the discharge is no longer associated with construction or construction-related activities.
2) The construction is complete and final site stabilization is achieved.
3) The operator's status changes.

2.4 Fee Requirements

The AZPDES Water Quality Protection Services Flat Fees shall be assessed on the number of acres of disturbed earth. There are three categories:

- Less than or equal to 1 acre
- 1 – 50 acres
- 50 or more acres

CGP fees are assessed as follows:

a. Initial Fee: the operator shall pay the initial AZPDES water quality protection service flat fee for coverage under this permit. This fee is collected at the time the NOI is submitted in myDEQ.

b. Annual Fee: In addition, the operator shall pay the applicable annual fee when billed, unless a Notice of Termination (NOT) has been submitted through myDEQ. The annual fee is due on the anniversary of the approval date of the NOI. See Part 2.3.3.

Note: Fees are subject to change annually, on August 1, based on changes in the Consumer Price Index from the Bureau of Labor Statistics. See A.A.C. R18-14-109, Table 6 and the 2025 CGP Fact Sheet for additional information

2.5 Authorization of Emergency-Related Construction Activities

Emergency-related construction activities are automatically authorized provided that:

a. The activity is being performed in order to avoid imminent endangerment to human health or the environment or in response to an emergency, and the activity requires immediate coverage.

b. The operator complies with all applicable requirements in the permit regarding discharges associated with the construction activities.

If the activity continues for more than 30-calendar days after the emergency started, the operator shall prepare a SWPPP, submit an accurate NOI in myDEQ, and pay the initial fee.

2.6 Terminating Coverage

2.6.1 Notice of Termination (NOT): To terminate permit coverage, the operator shall submit an accurate NOT in myDEQ. The operator is responsible for meeting the terms and conditions of this permit until the construction site's authorization is terminated. The operator may submit an accurate NOT in myDEQ after any of the following conditions have been met:

a. The operator has established final stabilization on all portions of the site for which the operator is responsible, in accordance with Part 3.4.2.

b. Another operator who has a valid authorization number under this general permit or an individual AZPDES permit has assumed control over all areas of the site that have not been finally stabilized (see Appendix B, Subsection 19).

c. For residential construction activities, temporary stabilization has been completed and the residence has been transferred to the homeowner (or a homeowner's association) in accordance with Part 3.4.2.

d. The planned construction activity identified on the original NOI was never initiated (i.e., grading was never started) and plans for construction have been permanently abandoned or indefinitely postponed.

e. The operator has obtained coverage for the site under another authorizing AZPDES permit.

f. The operator qualifies for one of the alternatives in Part 3.4.3 and retains the required documentation with the SWPPP, demonstrating compliance with the NOT.

2.6.2 Effective Date of Permit Termination: Authorization to discharge terminates under this permit when the operator terminates the NOI in myDEQ and receives the Notice of Termination (NOT) acknowledgement in myDEQ, which includes the termination date.

3.0 CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES AND WATER QUALITY STANDARDS

The control measures in this Part incorporate the technology-based effluent limitation guidelines to meet water quality standards that, where applicable, apply to all stormwater and allowable non-stormwater discharges from construction sites eligible for coverage under this permit. These requirements apply the national effluent limitations guidelines and new source performance standards found at 40 CFR Part 450. 21. An operator discharging to a WOTUS protected surface water shall comply with the control measures included in Part 3.3 through Part 3.7.

An operator discharging to a non-WOTUS protected surface water shall choose to implement non-numeric control measures in Part 3 to presumptively meet surface water quality standards (SWQS); or to conduct routine analytical monitoring per Part 7 to demonstrate that discharges do not exceed SWQS. Numeric effluent limitations guidelines do not apply. Permittees discharging to non-WOTUS protected surface waters are subject to state requirements only per A.R.S. 49-255.04(C), enforceable solely by ADEQ.

3.1 Non-numeric Effluent Limitations and Associated Control Measures

Operators must implement a range of pollution prevention and control measures. At a minimum, the operator shall design, install and maintain the following effluent limitations, reflecting the best practicable control technology currently available on construction sites:

a. Erosion and Sediment Control (Part 3.3)

b. Site Stabilization (Part 3.4)

c. Pollution Prevention (Part 3.5)

d. Controls for Allowable Non-Stormwater Discharges and Dewatering Activities (Part 3.6)

e. Surface Outlets (Part 3.7)

3.2 General Maintenance Requirements

3.2.1 Ensure that all control measures required, and described in Parts 3.3 through 3.7, remain in effective operating condition during permit coverage and are protected from activities that would reduce their effectiveness.

3.2.2 Inspect all control measures in accordance with the inspection requirements in Part 4. The operator shall document the findings in accordance with Part 4.4. When controls need to be replaced, repaired, or maintained, make the necessary repairs or revisions. Routine maintenance does not constitute a corrective action (see Part 5.1). The operator shall comply with the following schedule:

a. If the identified control measure that failed does not require significant maintenance, repair, or replacement, or if the problem can be corrected through routine maintenance, initiate work to fix the problem after discovery, and complete such work by the close of the next work day, if feasible.

b. When the installation of a new control (that is not in response to a corrective action in Part 5.1), or a significant repair of an existing control is needed, install the new or modified control and make it operational, or complete the repair, by no later than seven (7) calendar days from the time of discovery or before the next storm event (whichever is sooner), where feasible. If it is infeasible to complete the installation or repair within seven (7) calendar days or before the next storm event, document why it is infeasible in the SWPPP. The operator must also document the schedule for installing the control(s) and making it operational as soon as practicable after the seven (7) calendar day timeframe. Where these actions result in changes to any of the controls or procedures documented in the SWPPP, modify the SWPPP accordingly within seven (7) calendar days of completing this work.

3.3 Erosion and Sediment Control Requirements

Design, install, and maintain effective erosion and sediment controls to minimize the discharge of pollutants. The operator shall minimize the amount of soil exposed during construction activities. The operator is also

subject to the deadlines for temporary and/or permanent stabilization of exposed portions of the site in accordance with Part 3.4.

The following general requirements are applicable to all construction sites that implement the erosion and sediment controls in Part 3.3.

3.3.1 Design Requirements

a. The operator shall account for the following factors in designing control measures:

i. The expected amount, frequency, intensity, and duration of precipitation.

ii. The nature of stormwater runoff (i.e., flow) and all sources of run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channelized at the site, control measures must be designed to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.

iii. The soil type and range of soil particle sizes expected to be present on the site.

b. The operator shall direct stormwater flows to vegetated areas of the site to increase sediment removal, maximize stormwater infiltration, and filtering to reduce pollutant discharges, unless infiltration would be inadvisable due to the underlying geology and groundwater contamination concerns, or infeasible due to site conditions. The operator shall use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

3.3.2 Installation Requirements

a. Complete the installation of control measures by the time each phase of construction activity has begun. In the event it is infeasible to install one or more control measures prior to the start of construction activities, the operator shall ensure that those controls are installed as soon as possible. SWPPP records must document why it is infeasible.

b. Following the installation of these initial control measures, all other controls planned for this portion of the site and described in the SWPPP must be installed and made operational as soon as conditions on the site allow. The requirement to install control measures prior to construction activities for each phase of the project does not apply to activities associated with the actual installation of these controls.

c. The operator shall install all control measures in accordance with standard industry practices and following manufacturer specifications, including applicable design specifications. Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or local ordinances. Any departures from such specifications must reflect standard industry practice and must be explained in the SWPPP.

3.3.3 Stormwater Volume and Velocity Control

a. If off-site areas convey flows onto the construction site, the operator shall divert run-on flows and/or provide other appropriate control measures to account for off-site contributions of stormwater and non-stormwater flow.

b. If stormwater conveyance channels are used at the site, the operator shall design and construct them to avoid unstabilized areas and to reduce erosion, unless infeasible.

c. The operator shall minimize erosion of channels and their embankments, outlets, adjacent stream banks, slopes, and downstream waters during discharge conditions to provide a non-erosive flow velocity by using erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel and at any outlet.

d. Sediment Basins and Traps: If necessary, the operator shall install and maintain sediment basin(s) and / or traps to manage run-on, run-off, and sediment discharge from the

construction site.

i. Design Requirements. The operator shall provide sizing and calculation requirements for sediment basin(s) and shall indicate whether the basin(s) will be temporary or permanent, and shall implement the following:

a. When discharging from the sediment basin, utilize outlet structures that minimize pollutants.

b. Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), and prevent erosion of the basin's inlets and outlets using erosion controls and velocity dissipation devices.

c. Sediment basins must be situated outside of protected surface waters and any natural buffers established under Part 3.3.7, unless approved under a Clean Water Act Section 404 permit.

ii. Maintenance requirements. The operator shall maintain sediment basins, ponds, and traps, and remove accumulated sediment when design capacity has been reduced by 50%.

iii. Polymers, flocculants, or other ionic exchange treatments shall be used in accordance with manufacturer's instructions to provide for adequate settling time and minimize or eliminate these chemicals in the discharge. The operator shall comply with the requirements in Part 6.3.9.

3.3.4 Stormwater Discharge Control: The operator shall use control measures to moderate peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of outfalls. Examples of control measures that can be used to comply with this requirement include the use of erosion controls and/or velocity dissipation devices (e.g., check dams, sediment traps) within and along the length of a stormwater conveyance and at the outfall to slow down runoff.

3.3.5 Soil and Slope Control: The operator shall minimize the amount of soil exposed and the earth-disturbance of steep slopes through the following measures:

a. Preserve existing vegetation: If existing vegetation can be preserved, the operator shall clearly mark vegetation before clearing activities begin. Locations of trees and boundaries of buffer zones to be preserved shall be identified on the SWPPP site map.

b. Phase or sequence construction activities: To minimize the area of earth-disturbance at any one time.

c. Implement standard erosion and sediment control: Practices for steep slopes, such as phasing earth-disturbances to these areas and using stabilization practices designed to be used on steep grades. Where earth-disturbance of steep slopes cannot be avoided, operators shall implement controls suitable for steep slope earth-disturbances that are effective at minimizing erosion and sediment discharge (e.g., preservation of existing vegetation, hydraulic mulch, geotextiles and mats, compost blankets, earth dikes or drainage swales, terraces, velocity dissipation devices).

Note: In this permit, steep slopes and steep grades have a 15-foot or greater vertical rise of 100-feet of horizontal run, or 15% slope.

3.3.6 Minimize sediment discharges from the site: The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

a. Perimeter Control: The operator shall use appropriate control measures (e.g., fiber rolls, berms, silt fences, vegetative buffer strips, sediment traps, or equivalent sediment controls)

at all times for all down slope boundaries of the construction site and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

i. For sites where stormwater from disturbed areas, exclusive of rights-of-way, is conveyed to one or more retention basins that are designed to retain stormwater runoff from a local 100-year / 2-hour storm event, as calculated by an Arizona registered professional engineer, geologist or landscape architect (A.R.S. § 32-144) or equivalent, the operator is not required to utilize perimeter controls.

ii. For linear construction activities (see Appendix A) with rights-of-way that restrict or prevent the use of such perimeter controls, the operator shall maximize the use of these controls and document in the SWPPP why it is impracticable in other areas of the site.

b. Control discharges from stockpiles of sediment or soil: As necessary, implement the following control measures for any stockpiles, or cleared debris, composed in whole or in part, of sediment or soil:

i. Place stockpiles a minimum of 50-feet away from protected surface waters, stormwater conveyances (such as curb and gutter systems), or streets leading to stormwater conveyances, such that the placement does not conflict with local laws, and local rights-of-way are not impacted, unless infeasible.

ii. Locate the stockpiles a minimum of 50-feet away from any buffers established consistent with Part 3.3.7, unless infeasible.

iii. Protect stockpiles from contact with stormwater (including run-on) using a temporary perimeter sediment barrier.

iv. After the stockpile has been removed, the operator is prohibited from rinsing sediment, debris, or other pollutants accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), stormwater inlet, or protected surface water.

v. To the extent practicable, implement control measures to prevent the generation of wind-blown sediment and debris.

vi. Use perimeter controls or other effective sediment control measures around soil stockpiles, except when they are being actively worked. Provide controls that will effectively decrease runoff, such as berming or wattles; or locating stockpiles in an area that will avoid runoff or flow thru waters. For stockpiles that will be unused for 14-calendar days or more, provide cover or temporary stabilization as per part 3.4.1.

c. Stormwater Inlet Protection: The operator shall assess the need and install inlet protection measures necessary to remove sediment discharges from the site. If the site discharges to any stormwater inlet that the operator has authority to access and which carries stormwater flow to a protected surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), then inlet protection is required.

Note: Inlet protection measures may be removed in the event of flood conditions that may endanger the safety of the public. Such actions shall be documented in the SWPPP. The operator shall evaluate alternative control measures to be used in the future to prevent a recurrence of this problem.

d. If existing control measures need to be repaired, or modified, or if additional control measures are necessary, implementation shall be completed within seven (7) calendar days, or before the next storm event (whichever is sooner), unless otherwise prescribed in subpart e. i. – iv. below. If implementation before the next storm event is impracticable, the reason(s) for delay shall be documented in the SWPPP and alternative control measures shall be implemented as soon as possible.

e. If existing control measures need to be maintained, the following activities shall be

implemented:

i. Remove accumulated sediment when it reaches a maximum of one-third the height of the silt fence or one-half the height of a fiber roll.

ii. Sediment shall be removed from temporary and permanent sedimentation basins, ponds and traps when the depth of sediment in the basin reaches 50% of the basin's storage capacity.

iii. Construction site egress location(s) shall be inspected for evidence of off-site tracking of sediment, debris, and other pollutants onto paved surfaces. Removal of sediment, debris, and other pollutants from all off-site paved areas shall be completed as soon as practicable.

iv. Accumulations of sediment, debris, and other pollutants observed in off-site protected surface waters, drainage ways, catch basins, and other drainage features shall be removed in a manner and at a frequency sufficient to minimize impacts and to ensure no adverse effects on water quality.

Note: Removal of sediment, debris or other pollutants from off-site WOTUS protected surface waters may require Clean Water Act Section 404/401 permitting.

3.3.7 Maintain natural buffers adjacent to protected surface waters, unless infeasible.

a. Provide Natural Buffers or Equivalent Erosion and Sediment Controls: These requirements only apply when a protected surface water or a lake is located within 50-feet of the site's construction activities:

i. Areas not owned or are otherwise outside the activities of the operator may be considered areas of undisturbed natural buffer for purposes of compliance with this part.

ii. Provide and maintain an undisturbed natural buffer that is less than 50-feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

b. Alternatives: In areas where it is infeasible to maintain the 50-foot buffer, the operator shall:

i. Document in the SWPPP the reasons why the 50-foot buffer cannot be maintained, and identify the additional erosion and sediment controls selected.

ii. Preserve as much buffer as possible and design, implement and maintain additional erosion and sediment controls (such as berms, diversion dikes, sediment basins, etc.).

iii. Ensure that all discharges from the area of construction activity to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer.

iv. Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on the site plan.

v. Delineate, and clearly mark off, all natural buffer areas with flags, tape, or other marking device.

vi. Follow the additional stabilization requirements described in Part 3.4.1.

The operator is not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists.

c. Exceptions:

i. If there is no discharge of stormwater from the site through the 50-foot buffer area to a WOTUS protected surface water, the operator is not required to comply with the requirements in this Part. This includes situations where control measures, such as berms or other barriers that will prevent such discharges, have been implemented.

ii. Where no natural buffer exists due to preexisting development earth-disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, operators are not required to comply with the requirements in this Part, unless portions of the preexisting development are removed.

Where some natural buffer exists but portions of the area within 50-feet of the protected surface water are occupied by preexisting development earth-disturbances, operators are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction, an operator is not expected to compensate for the reduction in buffer function from the area covered by these preexisting earth-disturbances.

If, during the life of the project, any portion of these preexisting earth-disturbances will be disturbed, the area disturbed will be deducted from the area treated as natural buffer.

iii. Linear construction activities are not required to comply with the requirements in this Part if site constraints (e.g., limited right-of-way) prevent the operator from meeting any of the compliance alternatives in Part 3.3.7, provided that to the extent practicable, earth-disturbances are limited within 50-feet of the protected surface water and/or the operator provides supplemental erosion and sediment controls to treat stormwater discharges from construction activities within 50-feet of the protected surface water. The operator shall document the rationale for why it is infeasible to comply with the requirements in Part 3.3.7 in the SWPPP, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.

iv. "Small residential lot" construction (see Appendix A) is exempt from buffer requirements, provided that the operator minimizes the discharge of pollutants by complying with the requirements of Parts 3.3 through 3.8.

v. The following earth-disturbances within 50-feet of a protected surface water are exempt from the requirements in this Part:
   a. Construction approved under a Clean Water Act section 404 permit.
   b. Construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail).

Any of the above earth-disturbances that occur within the buffer area shall be documented in the SWPPP.

3.3.8 The operator shall minimize soil compaction, unless minimizing soil compaction is not required because the intended function of a specific area of the site dictates that it be compacted. Preserve topsoil, unless preserving topsoil is not required because the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

3.4 Site Stabilization Requirements

The operator shall comply with the stabilization requirements in this Part to minimize the discharge of pollutants. If revegetation plans include seeding, the SWPPP shall include seed mix and application specifications that will be used for vegetative stabilization. If the operator uses fertilizers or tackifiers on-site to establish vegetation, additional control measures shall be implemented to minimize the presence of these chemicals in the discharge.

3.4.1 Temporary Stabilization

The operator must provide temporary stabilization, or initiate permanent stabilization, of disturbed areas:

a. Within seven (7) calendar days of the most recent land earth-disturbance for areas within 50-feet of a protected surface water that is a WOTUS and is listed as impaired or not-attaining, or an OAW.

b. Within 14-calendar days of the most recent land earth-disturbance in areas where construction or support activities have been temporarily suspended or have permanently ceased, except as follows:

   i. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable.

   ii. When the site is using vegetative stabilization and is located in a drought-stricken area, vegetative stabilization measures shall be initiated as soon as practicable, when growing conditions are best for planting or seeding.

   iii. Where areas of construction activity are awaiting vegetative stabilization for periods greater than 14-calendar days after the most recent activity, non-vegetative methods of stabilization shall be employed. These methods shall be described in the SWPPP.

3.4.2 Final Stabilization

Final stabilization means that one of the following conditions (a, b, c, or d) is met:

a. All soil disturbing activities at the site have been completed; all construction materials, waste, and temporary erosion and sediment control measures (including any sediment that was being retained by the temporary erosion and sediment control measures) have been removed and properly disposed; and one or both conditions below are met:

   i. The site has a uniform vegetative cover (i.e., evenly distributed, without large bare areas) with a density of at least 70% of the native background vegetative cover for the area in place on all unpaved areas and areas not covered by permanent structures.

      When preconstruction native background vegetation covered less than 100% of the ground (e.g., arid areas, beaches), the coverage criteria is adjusted per the calculation: 70% x (% of preconstruction vegetation coverage) = % vegetative cover density required. For example, if the native vegetation covered 50% of the ground, 70% of 50% (.70 X .50 = .35) dictates that 35% cover density would be required.

   ii. Equivalent permanent non-vegetative stabilization measures (such as the use of riprap, gabions, gravel, or geotextiles) have been employed to provide effective cover of any areas of exposed soil.

b. For individual lots in residential construction, final stabilization means that the homebuilder has:

   i. Completed final stabilization as specified in Part 3.4.2.a.

   ii. Established temporary stabilization, including perimeter controls, for an individual lot prior to occupation of the home by the homeowner and has informed the homeowner of the need for, and benefits of, final stabilization.

iii. Submitted a NOT in myDEQ.

c. For construction activities on land used for agricultural purposes (e.g., pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to protected surface waters, and areas that are not being returned to their preconstruction agricultural use shall meet the final stabilization criteria above. Upon final stabilization, a NOT must be submitted in myDEQ.

d. The operator is not expected to apply temporary stabilization measures to areas that are intended to remain unvegetated or unstabilized following construction. For sites intended to remain unvegetated or unstabilized, such as airports, access roads and sports fields, final stabilization is complete if all construction materials, waste, and temporary control measures have been removed and properly disposed; the operator shall update the SWPPP explaining the reasoning and the intention of the land use after construction is complete; and a NOT must be submitted in myDEQ.

Any non-vegetative stabilization methods (e.g., decomposed granite, geotextiles, or degradable mulch) must achieve the same requirements for final stabilization as specified above.

3.4.3 Site Stabilization Alternatives

An operator with an eligible site may choose one of the following alternatives instead of implementing the stabilization requirements in Parts 3.4.1 and 3.4.2. Documentation of eligibility of one of the alternative stabilization activities must be included in the SWPPP and identified on the NOT in myDEQ.

a. Sites with additional retention capacity (see A.R.S. § 49 – 255.01(L)): Stabilization requirements in this permit do not apply to sites with retention capacity that meets or exceeds the 100-year/2-hour storm event as calculated by an Arizona registered professional engineer, geologist or landscape architect (A.R.S. § 32- 144) or equivalent, and that meet all of the following conditions:

i. There are no outfalls that discharge to a perennial or intermittent water body.

ii. All stormwater generated by disturbed areas of the site, exclusive of public rights-of-way, is directed to one or more retention basins.

iii. The operator complies with pollution prevention measures.

iv. The operator maintains capacity of retention basin(s)The operator determines temporary and final stabilization requirements for the site to reduce or minimize the discharge of sediment and other pollutants to meet the requirements of Parts 3.4.1 and 3.4.2.b.

b. Sites returned to pre-construction discharge conditions: Construction operators may qualify for this alternative by demonstrating that stormwater discharges from the site's pre- and post-construction activities are equal or less than in volume and pollutant load from disturbed areas as calculated by an Arizona registered professional engineer, geologist or landscape architect (A.R.S. § 32-144) or equivalent; and where the site does not have outfalls that will discharge to an impaired or not-attaining water or OAW.

c. Arid, semi-arid, and drought-stricken areas:

i. If it is the seasonally dry period or a period in which drought is occurring, and vegetative stabilization measures are being used:

a. Initiate, and within 14-calendar days of temporary or permanent cessation of work in any portion of the site, complete the installation of non-vegetative stabilization measures to the extent necessary to prevent erosion.

b. As soon as practicable, given conditions or circumstances on the site, complete all activities necessary to seed or plant the area to be stabilized.

c. If construction is occurring during the seasonally dry period, indicate in the SWPPP the beginning and ending dates of the seasonally dry period and the site conditions. Also include the schedule to be followed for initiating and completing vegetative stabilization.

ii. Unforeseen circumstances: Operators that are affected by unforeseen circumstances that delay the initiation and/or completion of vegetative stabilization:

a. Immediately initiate, and within 14-calendar days, complete the installation of temporary non-vegetative stabilization measures to prevent erosion.

b. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site.

c. Document in the SWPPP the circumstances that prevented the deadlines in Part 3.4.1 and 3.4.2 from being met; and the schedule to be followed for initiating and completing stabilization.

Final stabilization is met if the area has been seeded or planted to establish vegetation that provides 70 % or more of the vegetative cover, native to local undisturbed areas, within three (3) years and, to the extent necessary to prevent erosion on the seeded or planted area, non-vegetative erosion controls have been applied to provide cover for at least three (3) years without active maintenance.

3.5 Pollution Prevention Requirements

3.5.1 The operator shall design, install, and maintain effective pollution prevention measures to prevent or minimize the discharge of pollutants from spilled or leaked materials from construction activities. To meet this requirement, the operator shall:

a. Eliminate certain pollutant discharges from the site (see Part 1.4, Prohibited Discharges).

b. Properly maintain all pollution prevention controls (see Part 3.2, General Maintenance Requirements).

c. Comply with pollution prevention control measures for pollutant-generating activities that occur at the site as outlined in this Part.

The operator shall comply with the pollution prevention standards in this Part if any of the activities described in this Part are conducted at the site or at any construction support activity areas covered by this permit (see Part 1.3.1.c.).

3.5.2 Minimize the Discharge of Pollutants from equipment and vehicle washing, wheel wash water, and other wash waters.

a. Concrete washout: To comply with the prohibition in Part 1.4 for discharges of wastewater from washout of concrete:

i. Where possible, concrete suppliers should conduct washout activities at their own plants or dispatch facilities.

ii. If conducted at the construction site, the operator shall employ control measures to contain and manage on-site concrete washout to prevent discharge (see Part 6.3.8).

iii. Specify locations of concrete washout activities that will occur at the construction site.

iv. Remove and dispose of hardened concrete waste consistent with handling other construction wastes in Part 3.5.4.

v. Direct all wash water into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.

vi. Locate washout or cleanout activities a minimum of 50-feet away from protected surface waters, constructed or natural site drainage features, and stormwater inlets. Designate areas to be used for these activities and conduct these activities only in these areas, if feasible.

Note: An aquifer protection general permit 1.12 is available for discharges of wastewater from washing concrete from trucks, pumps, and ancillary equipment to an impoundment if the conditions are met, pursuant to A.A.C. R18-9-B301(L).

b. Washing of equipment and vehicles: Any operator that washes equipment or vehicles on-site shall implement the following control measures:

i. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing.

ii. To comply with the prohibition in Part 1.4, for storage of soaps, detergents, or solvents, the operator shall provide either cover (e.g., tarps or other cover that will not increase runoff, or temporary roofs) to prevent these detergents from coming into contact with rainwater, or implement a similarly effective means designed to prevent the discharge of pollutants from these areas.

c. Washing of applicators and containers used for paint or other materials: To comply with the prohibition in Part 1.4, the operator shall provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials. To comply with this requirement, the operator shall:

i. Direct all wash water into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.

ii. Locate any washout or cleanout activities a minimum of 50-feet away from protected surface waters and stormwater inlets or conveyances, and to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

iii. Handle washout or cleanout wastes as follows:

a. Do not dump liquid wastes in, or allow them to enter into, constructed or natural site drainage features, stormwater inlets, or protected surface waters.

b. Do not allow liquid wastes to be disposed of through infiltration or to otherwise be disposed of on the ground.

d. Fueling and maintenance of equipment or vehicles: Any operator that conducts fueling and/or maintenance of equipment or vehicles at the site shall provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place. To comply with the prohibition in Part 1.4, operators shall:

i. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA.

ii. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids.

iii. Use drip pans and absorbents under leaky vehicles.

iv. Dispose of, or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements.

v. Clean up spills or contaminated surfaces immediately, using dry clean-up methods where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

vi. Not "hose down" the contaminated area.

e. Pavement washing: The permittee shall not direct pavement rinse waters directly into a protected surface water, stormwater inlet, or constructed or natural drainage feature.

3.5.3 Construction Site Egress: The operator shall implement effective control measures to minimize tracking of sediments, debris, and other pollutants from vehicles, and equipment leaving the site (e.g., stone pads, concrete or steel wash racks, or equivalent systems). Fine grains that remain visible *(i.e., staining)* on the surfaces of off-site streets, other paved areas, and sidewalks after the implementation of sediment removal practices are not a violation of this part.

If site conditions make it infeasible to install structural controls to prevent track-out (e.g., an operator conducting linear construction activities within a paved right-of-way or immediately adjacent and parallel to a paved right-of-way), the operator shall document the following in the SWPPP:

a. Explain why structural control measures cannot be installed.

b. Describe what alternative measures will be used to prevent sediment from being tracked-out or accumulated on paved areas.

c. Describe what procedures will be used to ensure track-out is discovered and removed as soon as practicable.

3.5.4 The operator shall minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site, to precipitation. These requirements do not apply to those products, materials, or wastes that are not a source of stormwater contamination or that are designed to be exposed to precipitation.

a. Pollution Prevention Measures: The operator shall implement pollution prevention procedures to prevent litter, construction debris, and construction chemicals exposed to stormwater from becoming a pollutant source for stormwater discharges. These procedures shall include storage practices to minimize exposure of the materials to precipitation, and spill prevention and response practices.

The operator shall consider and implement the following control measures:

i. For building products: In storage areas, provide either cover (e.g., tarps or other cover that will not increase runoff, or temporary roofs) to prevent these products from coming into contact with precipitation, or implement a similarly effective means designed to prevent the discharge of pollutants from these areas.

ii. For pesticides, herbicides, insecticides, fertilizers, and landscape materials:

a. In storage areas, provide either cover (e.g., tarps or other cover that will not increase runoff, or temporary roofs) to prevent these chemicals, typically stored in bags or rough packaging, from coming into contact with precipitation, or implement a similarly effective means designed to prevent the discharge of pollutants from these areas.

b. Applying at a rate and in amounts consistent with manufacturer's specifications, and in accordance with licensing requirements from the Arizona Department of Agriculture, Pest Management Division.

c. Applying at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth.

d. Not applying to frozen ground.

e. Complying with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

f. Any point-source discharge resulting from the application of pesticides, herbicides, insecticides, etc. to a protected surface water may require coverage under the AZPDES Pesticide General Permit (PGP) issued by ADEQ. Obtaining coverage under the CGP does not alleviate the responsibility of the operator to obtain and/or implement the PGP.

iii. For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:

a. Containers must be water-tight, and must be kept closed, sealed, and secured when not being actively used.

b. Have a spill kit available on site that is in good working condition (not damaged, expired, or containing insufficient supplies) and ensure qualified personnel are available to respond immediately in the event of a leak or spill.

c. Store containers a minimum of 50-feet from protected surface waters, constructed or natural site drainage features, and stormwater inlets. If infeasible due to site constraints, store containers as far away from these features as the site allows. If site constraints prevent storing containers 50-feet away from protected surface waters or the other features identified, document in the SWPPP the specific reasons why the 50-foot setback is infeasible, and how containers will be stored as far away as the site allows.

d. Provide either cover (e.g., temporary roofs) to minimize the exposure of these containers to precipitation; or appropriately sized secondary containment (e.g., curbing, spill berms, dikes, spill containment pallets, double-wall, above-ground storage tank).

e. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

iv. For hazardous or toxic waste:

a. Separate hazardous or toxic waste from construction and domestic waste.

b. Store in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements.

c. Store all containers that will be stored outside within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in covered area or having a spill kit available on-site).

d. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements.

e. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

v. For construction, demolition, and domestic waste: Provide waste containers (e.g., dumpster or trash receptacle with covers/ lids) of sufficient size and number to contain construction and domestic wastes. In addition:

a. Position waste containers outside of protected surface waters, or stormwater conveyances, such as curb and gutter systems, or streets.

b. For waste containers with lids, keep lids closed when not in use; close lids at the end of the business day and during storm events, if feasible.

c. For waste containers without lids, provide either (1) cover (e.g., tarp, tarps or other cover that will not increase runoff, temporary roofs) to minimize the exposure of wastes to precipitation, or (2) appropriately sized secondary containment (e.g., curbing, spill berms, dikes, spill containment pallets, above-ground storage tank).

d. On work days, clean up and dispose of waste in designated waste containers.

e. Clean up immediately if containers overflow and if there is litter elsewhere on the site.

vi. For sanitary waste: Position portable toilets outside of protected surface waters, or stormwater conveyances, such as curb and gutter systems, or streets. Ensure that they are secured and will not be knocked or tipped over, using stakes or tie downs or other similar control measures.

3.5.5 Spill Prevention and Response Procedures: Operators are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part 1.4. The operator shall minimize the potential for leaks, spills and other releases, and develop plans for timely and effective clean-up of spills if or when they occur by implementing measures such as:

a. Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.

b. Preventative measures such as barriers between material storage and traffic areas, appropriately sized secondary containment provisions, and procedures for material storage and handling.

c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause or detect a spill or leak should be knowledgeable in the proper reporting procedures established by their facility. Employees who are responsible for spill response and/or cleanup, must be properly trained and have necessary spill response equipment available.

d. Procedures for notification of appropriate facility qualified personnel and emergency response. Where a leak, spill, or other release occurs that contains a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, the operator shall immediately notify ADEQ Emergency Response Duty Office at (602) 771-2330, or toll free at (800) 234-5677.

Within seven (7) calendar days of knowledge of the release, operators shall provide a description in the SWPPP of: the release; the circumstances leading to the release; and the date of the release. Local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies. A valid Spill Prevention, Control and Countermeasure Plan (SPCC) may be referenced in the

SWPPP.

e. Fertilizer Discharge Restrictions: Operators are required to minimize discharges of fertilizers containing nitrogen or phosphorus by applying these products consistent with manufacturer's specifications.

3.6 Controls for Dewatering Activities

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by stormwater controls, such as sediment basins or traps; dewatering tanks; tube settlers; weir tanks; filtration systems designed to remove sediment; chemical treatment; and transportation offsite for disposal. The operator must comply with the following to minimize the discharge of pollutants in a manner that does not cause nuisance conditions, including erosion/sedimentation in the protected surface water or adjacent properties:

3.6.1 Route dewatering water through a filter to remove hydrocarbons, if the operator believes there may be a sheen caused by the dewatering activity; or if a sheen is observed.

3.6.2 Do not discharge visible floating solids or foam.

3.6.3 The discharge must not cause the formation of a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the protected surface water.

3.6.4 The operator shall retain super-chlorinated wastewaters (i.e., containing chlorine above 4 mg/L, which is the maximum residual level acceptable in drinking water systems) on-site until the chlorine dissipates, or shall otherwise effectively dechlorinate the water to concentrations that meet surface water quality standards of the protected surface water prior to discharge.

3.6.5 Discharge points shall implement velocity dissipation devices, or the discharge shall be conducted at a low flow rate that does not cause erosion or scour.

3.7 Surface Outlets

When discharging from basins, and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

3.8 Surface Water Quality Standards (SWQS)

3.8.1 ADEQ may impose surface water quality-based requirements on a site-specific basis, or require the operator to obtain coverage under an individual permit in accordance with Part 1.2.8, if information in the NOI, required reports, or from other sources indicates that additional controls are necessary to not cause or contribute to an exceedance of the effluent limits contained in this permit.

3.8.2 Discharge Limitations for Impaired or Not-attaining Waters and OAWs

Operators of construction sites that have one or more outfalls that are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining water, or OAW, are required to comply with the following requirements, which supplements the requirements applicable to the site in other corresponding parts of this permit:

a. Frequency of Site Inspections: The operator shall conduct inspections at the frequency specified in Part 4.2.1.a.

b. Deadline to Complete Stabilization: The operator shall comply with the deadlines for completing site stabilization as specified in Part 3.4.2.

c. Sampling and Analysis Plan: The operator shall prepare and submit a sampling and analysis plan as outlined in Part 7.2.

If the discharge is to a protected surface water that is a WOTUS and is listed as an impaired or not-attaining water, ADEQ may notify the operator that additional limits or controls are necessary to not cause or contribute to an exceedance of the effluent limits contained in this permit, , any applicable waste load allocation (WLA), to prevent the site from contributing to an impairment, or if coverage under an individual permit is necessary in accordance with Appendix B, Subsection 17.

If during coverage under a previous permit, the operator was required to install and maintain control measures specifically to meet the assumptions and requirements of an U.S. EPA approved or established TMDL (for any parameter) or to otherwise control a discharge to not cause or contribute an exceedance of applicable surface water quality standards, the operator shall continue to implement such controls as part of this permit.

4.0 INSPECTIONS

4.1 Inspector Qualifications

The operator shall provide qualified personnel (as defined in Appendix A) to perform inspections of the site in accordance with Parts 4.2 through 4.5 of this permit.

4.2 Inspection Schedule

At a minimum, the operator shall conduct a site inspection in accordance with one of the schedules listed below. Inspections shall be implemented when earth-disturbing activities begin, depending on the operator's choice of schedule. The inspection schedule shall be documented in the SWPPP and updated as necessary.

4.2.1 Routine Inspection Schedule:

The operator shall ensure inspections are performed at the site as indicated below to ensure control measures are functional and that the SWPPP is being properly implemented.

a. The site will be inspected a minimum of once within seven (7) calendar days, but not within five (5) calendar days of the previous inspection.

b. The site will be inspected a minimum of once within 14-calendar days, but not within 10-calendar days of the previous inspection, and within 24-hours of a storm event producing 0.5 inches or more of rain in 24 hours, in accordance with part 4.2.2.b below.

4.2.2 Storm Events:

a. The operator shall keep a properly maintained rain gauge on the site or obtain storm event information from a weather station that is representative of the location. The source used to obtain storm event information shall be documented in the SWPPP and updated as necessary.

b. For any day of rainfall during normal business hours that measures 0.25 inch or greater, the total rainfall measured for that day shall be documented in the SWPPP.

c. If the operator has chosen the 14-calendar day inspection schedule above, and a storm event produces 0.5 inches or more of rain within a 24-hour period, including when there are multiple smaller storms that each produce less than 0.5 inches, but overall accumulation is more than 0.5 inches in a 24-hour period, the operator shall conduct an inspection within 24-hours after each occurrence of 0.5 inches of rain within 24-hours, throughout the remainder of the storm.

4.2.3 Inspection Schedule for Sites Upstream of Impaired or Not-attaining Waters or OAWs:

If any portion of the construction site has one or more outfalls within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining or an OAW, the operator shall inspect the site at least once every seven (7) calendar days. The operator may reduce inspections to the schedule specified in Part 4.2.1 for those areas of the construction site that have undergone temporary or final stabilization.

4.2.4 Reduced Inspection Schedule:

The operator may reduce inspections if the entire site has been temporarily stabilized, discharges are unlikely based on seasonal rainfall patterns, or runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists). With a reduced inspection schedule, the site shall be inspected at least once per month (but not within 14-calendar days of the previous inspection); and before an anticipated storm event; and within 24-hours of each storm event producing 0.25 inches or more of rain in 24 hours, including when there are multiple smaller storms that each produce less than 0.25 inches, but overall accumulation is more than 0.25 inches in a 24-hour period, the operator shall conduct an inspection within 24-hours after each occurrence of 0.25 inches of rain within 24-hours, throughout the remainder of the storm, as outlined in permit part 4.2.2 above.

4.2.5 Inspection Schedule for Inactive and Unstaffed Sites:

A site is considered inactive and unstaffed if it will have an anticipated period of no construction activity for at least six (6) consecutive months. Inactive and unstaffed sites that have one or more outfalls within 1/4 mile upstream of an impaired or not-attaining water or OAW are not eligible for this reduced inspection frequency unless they have undergone temporary stabilization. The operator is responsible for all of the following:

a. Immediately before becoming inactive and unstaffed, the operator shall perform an inspection in accordance with Part 4.3. All control measures must be in operational condition in accordance with Part 3.2 prior to becoming inactive and unstaffed.

b. During the time the site is inactive and unstaffed, the operator shall perform an inspection at least once every six (6) months and within 24-hours of each storm event producing 0.25 inches or more of rain in 24 hours, throughout the duration of the storm event, as outlined in 4.2.2 above.

c. The operator shall ensure that non-storm event inspections are at least three (3) months apart.

d. The operator shall ensure that all control measures are maintained in operational condition.

e. The operator shall ensure that the site is secured, such as limiting access, blocking or fencing.

f. The operator shall maintain a statement in the SWPPP, as required in Part 6.4 indicating that the construction site is inactive and unstaffed. The statement shall be signed and certified in accordance with Appendix B, Subsection 9.

If circumstances change and the site becomes active and/or staffed, this exception no longer applies and the operator shall immediately resume the routine inspection schedule. ADEQ retains the authority to revoke this exception from routine inspections where it is determined that the discharge causes, has a reasonable potential to cause, or contribute to an exceedance of an applicable water quality standard, including designated uses.

4.2.6 Arid, semi-arid, or drought-stricken areas (as defined in Appendix A):

If it is the seasonally dry period or a period in which drought is occurring, the operator may reduce the frequency of inspections to once (1x) per month and within 24-hours of the occurrence of a storm event that produces 0.25 inches or greater of rain within a 24-hour period, throughout the duration of the storm event, as outlined in 4.2.4 above. The operator shall document in the SWPPP that this reduced schedule is being used, and identify the beginning and ending dates of the seasonally dry period.

4.2.7 Frozen conditions:

a. If construction activities are being suspended due to frozen conditions, inspections may be temporarily suspended on the site until thawing conditions (as defined in Appendix A) begin to occur if:

   i. Discharges are unlikely due to continuous frozen conditions that are likely to continue at the site for at least three (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, immediately resume the regular inspection frequency. Use data sets that include the most recent data available to account for recent precipitation patterns and trends.

   ii. Land earth-disturbances have been suspended.

   iii. All disturbed areas of the site have been stabilized in accordance with part 3.4.3.

b. If construction activities are still being conducted during frozen conditions, the inspection frequency may be reduced to once (1x) per month if:

   i. Discharges are unlikely due to continuous frozen conditions that are likely to continue at the site for at least three (3) months based on historic seasonal averages. If unexpected

weather conditions (such as above freezing temperatures or rain events) make discharges likely, immediately resume the regular inspection frequency, as applicable.

ii. Except for areas in which construction activities are being conducted, disturbed areas of the site have been stabilized in accordance with part 3.4.3.

4.2.8 Inspections are only required during the site's normal working hours. If an inspection day (except those required relative to a rainfall event) falls on a Saturday or holiday, the inspection may be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection may be conducted on the following Monday. If rainfall events occur on the weekend or holiday, an inspection relative to that event may be conducted the following workday.

4.2.9 Inspections are not required under Adverse Conditions. The operator is not required to inspect areas that, at the time of the inspection, are considered unsafe for inspection qualified personnel. Inspections may be postponed when conditions such as local flooding, high winds, electrical storms, or situations that make inspections unsafe. The inspection must resume as soon as conditions are safe.

4.3 Scope of Inspections

At a minimum, the inspector shall examine each of the following, during each inspection:

a. All areas of the site where earth is being disturbed, cleared, graded, or excavated and that have not yet completed stabilization.

b. All structural controls identified in the SWPPP to ensure they are in place and functioning as intended. Repair, replace, or maintain any controls as necessary in accordance with Part 3.2.

c. The effectiveness of non-structural controls and practices (such as good housekeeping practices and pollution prevention measures).

d. All areas of the site used for storage of materials (such as materials, waste, borrow, and equipment storage and maintenance areas) that are exposed to precipitation.

e. All areas where stormwater typically flows within the site, including constructed or natural site drainage features designed to divert, convey and/or manage stormwater.

f. All locations where new or modified control measures are necessary to meet the requirements of Part 3.

g. Locations where vehicles and equipment enter or exit the site for evidence of tracking sediment, debris, and other pollutants onto and off the site.

h. Site conditions for evidence of, or the potential for, pollutants entering the municipal separate storm sewer (MS4).

i. The presence of materials or conditions subject to the CGP that are not addressed in accordance with the SWPPP.

j. All outfalls, to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to surface waters.

k All locations where stabilization measures have been implemented.

l. When a discharge is occurring during an inspection:

i. Identify all discharges points at the site.

ii. Observe and document the visual quality of the discharge, and take note of the characteristics of the discharge, including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of stormwater pollutants. Also check for signs of these same pollutant characteristics that are visible from the site and attributable to the discharge in protected surface waters or in other constructed or natural site drainage features.

m. When there are no discharges occurring during an inspection, check for signs of sediment deposition

that are visible and can be attributed to discharges from the site (e.g., buildup of sediment deposits on nearby streets, curbs, or open conveyance channels).

n. Identify any incidents of non-compliance observed.

4.4 Inspection Report Form

For each inspection, the operator shall complete an inspection report, either on a form provided on the ADEQ website, or an equivalent form developed by the operator that documents all of the information required by this permit. The operator may supplement the inspection report form as necessary with additional information, forms or drawings. Within seven (7) calendar days of completing the inspection, the corresponding inspection report shall be placed with previous reports (in chronological order) and kept with the SWPPP. At a minimum, the report shall include:

a. The inspection date.

b. Name(s) and title(s) of qualified person(s) making the inspection.

c. Identification of discharges of sediment or other pollutants from the site. Identify the outfall(s) and associated control measures on the site map(s), in accordance with Part 6.3.5.

d. For inspections occurring during or after a storm event:

i. Best estimate of the beginning of each storm event.

ii. Duration of each event.

iii. Approximate amount of rainfall for each event (in inches).

iv. A description of the physical characteristics of the stormwater discharge from the site, when present.

v. Document the evidence of erosion, sedimentation and other pollutants.

vi. Document the presence of control measures in all areas inspected and whether such controls are operating effectively.

e. Identification of control measures that need to be maintained, failed to operate as designed, or proved inadequate. Until removed from the site, identify the location(s) of these control measures on the site map(s).

f. Identification of what additional control measures are needed, if any, that did not exist at the time of the inspection. Identify the location(s) of these control measures on the site map(s).

g. Identification of all sources of non-stormwater discharges occurring at the site and associated control measures in place.

h. Identification of material storage areas and, evidence of or potential for, pollutant discharge from such areas.

i. Corrective actions required (in accordance with Part 5.3), including any necessary changes to the SWPPP, and implementation dates (of corrective actions and SWPPP changes).

j. Identification of any other instances of non-compliance with the conditions of this permit that are not associated with Part 4.4.i, or where the inspector does not identify any incidents of non-compliance, the inspection report shall contain a certification that the construction activities or site is being operated in compliance with the SWPPP and this permit.

k. If the operator determines that certain area(s) of the site are unsafe to inspect, the Inspection Report shall document the unsafe condition(s) and specify the locations where the unsafe condition(s) exists.

4.5 Inspection Follow-up

4.5.1 Control Measure Assessment: Based on the findings and observations of the inspection, the operator shall implement the changes necessary to comply with the conditions in Part 3 and revise the SWPPP

as needed in accordance with Part 6.5. The changes shall be implemented in accordance with the schedule described in "General Maintenance Requirements" in Part 3.2.

4.5.2 Corrective Actions: Based on the scope of inspection conducted in accordance with Part 4.3, the operator shall determine and implement appropriate corrective actions, and meet the applicable deadlines pursuant to Part 5.

5.0 CORRECTIVE ACTIONS

5.1 Corrective Action Triggers

Corrective actions are actions the operator takes in compliance with this Part to modify, or replace any control measure that failed to meet the conditions of Part 3. Routine maintenance or repairs do not constitute corrective actions. If any of the following conditions at the construction site occur resulting in or from a failure of a control measure, the operator shall implement new or modified control(s):

a. A necessary control measure was never installed, was installed incorrectly, or was not installed in accordance with the requirements in Part 3.2.

b. A stormwater control needs to be repaired or replaced (beyond routine maintenance required under Part 3.2).

c. One of the prohibited discharges in Part 1.4 is occurring or has occurred.

d. ADEQ or U.S. EPA determines that revisions to the control measures are necessary to meet the requirements of Part 3.

e. A discharge is causing an exceedance of an applicable surface water quality standard.

On the same day a condition requiring corrective action is discovered, the operator shall take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if the problem is identified when it is too late in the work day to initiate a corrective action, the corrective action shall be initiated on the following work day, unless the condition poses imminent endangerment to human health or the environment, in which case the operator shall take immediate action.

5.2 Corrective Action Deadlines

Any control measures or repairs required must be made operational, or completed, by no later than seven (7) calendar days from the time of discovery of the condition listed in Part 5.1. If the operator cannot complete the necessary repairs or installation of controls within seven (7) calendar days, the SWPPP shall include the following:

a. The reason it is infeasible to complete the installation or repair within the seven (7) calendar day timeframe.

b. The schedule for installing and making the control measure(s) operational as soon as practicable after the seven (7) calendar day timeframe.

Any corrective actions that result in changes to any of the control measures or procedures shall be documented in the SWPPP within the seven (7) calendar days of completing the corrective action work. The operator shall complete all corrective actions in accordance with the deadlines specified in this Part.

5.3 Corrective Action Report

For each corrective action taken in accordance with this Part, the operator shall document the details of the corrective action in the inspection report required by Part 4.4. These reports shall be signed in accordance with the signatory requirements in Appendix B, Subsection 9 and maintained with the SWPPP in accordance with the record keeping requirements in Appendix B, Subsection 11.

5.3.1 When any condition listed in 5.1 occurs and there is a discharge of pollutants to a WOTUS protected surface water that is listed as impaired, not-attaining or an OAW, the operator shall submit a corrective action report to ADEQ on or before 30-calendar days (from the date of the incident), in accordance with Part 8.1. The operator shall retain a copy of the inspection report documenting the corrective action on-site with the SWPPP as required in Part 6.4.

5.3.2 Report Schedule: Within seven (7) calendar days of discovery of any condition in Part 5.1. the operator shall document and maintain with the SWPPP the following information:

a. Summary of corrective action taken or to be taken.
b. Date corrective action initiated or will be initiated.
c. Date corrective action completed or expected to be completed.

6.0 STORMWATER POLLUTION PREVENTION PLAN

6.1 General Information

6.1.1 A site specific SWPPP shall be developed by a "qualified person" before the operator may submit the NOI for permit coverage, and before conducting any construction activity. Any SWPPP prepared for coverage under a previous version of this AZPDES construction general permit must be reviewed and updated by the operator to comply with this permit's requirements prior to submitting the NOI in accordance with Part 2.3.

At least one SWPPP must be developed for each construction activity or site covered by this permit. A "joint" or "common" SWPPP may be developed and implemented as a cooperative effort where there is more than one operator at a site. All operators shall either implement their portion of a common SWPPP or develop and implement their own SWPPP.

6.1.2 The SWPPP shall be prepared and implemented in accordance with standard industry practices and shall:

a. Identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site.

b. Identify, describe, and ensure implementation of control measures that will be used to reduce pollutants in stormwater discharges from the construction site.

c. Assure compliance with the terms and conditions of this permit.

d. Identify the responsible person for on-site SWPPP implementation.

6.1.3 All operator(s) shall sign and certify the SWPPP in accordance with the signatory requirements of Appendix B, Subsection 9.

6.1.4 The operator shall implement the SWPPP from initial commencement of construction activity until a NOT is submitted to ADEQ in accordance with Part 2.6.

6.1.5 SWPPPs that do not meet all provisions of this permit are considered incomplete. Operating under an incomplete SWPPP is a violation of the permit.

6.1.6 Emergency-Related Construction Activities:
Operators conducting construction activities in response to an emergency (see Part 2.5), shall document the cause of the emergency (e.g., natural disaster, extreme flooding conditions, etc.), information substantiating its occurrence (e.g., state disaster declaration or similar state or local declaration), and describe the construction necessary to reestablish affected public services.

6.2 Types of Operators

Either Part 6.2.a, 6.2.b, or both, will apply depending on the type of operational control a person exerts over the site. Part 6.2.c applies to all operators who have control over only a portion of a construction site.

a. Operators with Operational Control over Construction Plans and Specifications shall ensure that:

i. The SWPPP indicates the areas of the site where the operator has operational control over construction activity specifications, including the ability to make revisions in specifications.

ii. All other operators implementing portions of the SWPPP impacted by any changes made to the SWPPP are notified of such revisions in a timely manner.

iii. The SWPPP indicates the name(s) of the person(s) with day-to-day operational control of those activities necessary to ensure compliance with the SWPPP or other permit conditions.

b. Operators with Control over Day-to-Day Activities shall ensure that:

i. The SWPPP identifies the persons responsible for implementation of control measures identified in the SWPPP.

ii. The SWPPP indicates areas of the site where each operator has operational control over day-to-day activities.

iii. The SWPPP indicates the name(s) of the person(s) with operational control over construction activity specifications (including the ability to make revisions in specifications).

c. Operators with Control over Only a Portion of a Larger Construction Site are responsible for compliance with the terms and conditions of this permit as it relates to the activities on the operator's portion of the construction site (including implementation of control measures required by the SWPPP). Operators shall ensure either directly or through coordination with other operators, that activities do not render another person's control measure(s) ineffective.

6.3 SWPPP Contents

6.3.1 Stormwater Team: Each operator shall assemble a "stormwater team" that will be responsible for carrying out compliance activities associated with this permit. The stormwater team must include the following people:

a. Qualified personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls).

b. Qualified personnel responsible for the application and storage of treatment chemicals (if applicable).

c. Qualified personnel who are responsible for conducting inspections as required in Part 4.1.

d. Qualified personnel who are responsible for initiating and completing corrective actions as required in Part 5.

Members of the stormwater team shall be identified in the SWPPP pursuant to Part 6.3.1. Each member of the stormwater team shall have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP, and other relevant documents or information that must be kept with the SWPPP.

The SWPPP must identify the name, title, a description of the qualifications, and a copy of any training certificates of team members, including inspector(s), as well as their individual responsibilities. The team may include members who are not employed by the operator (such as third-party consultants).

6.3.2 General Training Requirements for Stormwater Team Members

Prior to the commencement of construction activities, the operator shall ensure that all persons assigned to the stormwater team understand the requirements of this permit and their specific responsibilities with respect to those requirements, including the following related to the scope of their job duties:

a. The permit requirements and deadlines associated with the installation, maintenance, and removal of stormwater controls, as well as site stabilization.

b. The location of all stormwater controls on the site required by this permit and how they are to be maintained.

c. The proper procedures to follow with respect to the permit's pollution prevention requirements.

d. When and how to conduct inspections, record applicable findings, and take corrective actions. Specific training requirements for persons conducting site inspections are included in Part 6.3.3 below.

The operator is responsible for ensuring that all activities on the site comply with the requirements of this permit. The operator is not required to provide or document formal training for subcontractors or other outside service providers (unless the subcontractors or outside service providers are responsible for conducting the inspections required in Part 4, in which case the operator must provide such documentation consistent with Part 6.3.1), but the operator shall ensure that such qualified personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform.

6.3.3 Sequence and Estimated Dates of Construction Activities

The SWPPP must include a description of the intended sequence of construction activities, including a schedule of the estimated start dates and the duration of the activity, for all of the following activities:

a. Installation of control measures and when they will be made operational, including an explanation of the sequence and schedule for installation of the control measures.

b. Commencement and duration of construction activities, including clearing and grubbing, grading, site preparation (i.e., excavating, cutting and filling), underground utility installation, infrastructure installation, final grading, and creation of soil and vegetation stockpiles requiring stabilization.

c. Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site including the beginning and ending dates of inactive/ unstaffed status, when applicable.

d. Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which the operator is subject in Part 3.4.

e. Removal and proper disposal of temporary stormwater conveyances, channels, and other control measures; removal of construction equipment and vehicles; and cessation of any pollutant-generating activities.

6.3.4 Site Description

The SWPPP shall describe the construction site, including:

a. A description of the site and its intended use after the Notice of Termination (NOT) is submitted to ADEQ (e.g. low density residential, shopping mall, highway, etc.).

b. The total area of the site, and an estimate of the total area of the site expected to be disturbed by construction activities, including off-site supporting activities, borrow and fill areas, staging and equipment storage areas, in acres.

c. The percentage of the site that is impervious (e.g., paved, roofed, etc.) before and after construction.

d. A description of the site's soils, including potential for erosion.

e. Areas where it is infeasible to maintain a 50-foot buffer in accordance with Part 3.3.7, describe which alternative was selected for the site, and comply with any additional requirements to provide documentation.

f. A description of all material storage areas (including overburden and stockpiles of dirt, borrow areas, etc.) used for the existing site unless those areas are covered by another AZPDES permit.

g. A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify:

   i. The location of the construction site and one (1) mile radius.

   ii. The protected surface waters including tributaries within a one (1) mile radius of the site.

6.3.5 Site Map(s)

The SWPPP shall contain a legible site map or series of maps completed to scale, showing the entire site that identifies:

a. Topography of the site, existing types of cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of flow onto, over, and from the site property, before and after major grading activities.

b. Drainage divides and direction of stormwater flow for all drainage areas located within the site limits (i.e., use arrows to show which way stormwater will flow).

c. Areas of soil earth-disturbance and areas that will not be disturbed. Boundaries of the property and of the locations where construction activities will occur, including:

   i. Locations where construction activities will occur, noting any phasing of construction activities.

   ii. Locations where sediment or soil will be stockpiled.

   iii. Locations of any crossings of protected surface waters.

   iv. Designated points on the site where vehicles will exit onto paved roads.

   v. Locations of construction support activity areas covered by this permit (see Part 1.3.1.c).

d. Locations of temporary and permanent control measures identified in the SWPPP.

e. Locations where stabilization control measures are expected to occur.

f. Areas protected by buffers (i.e., either the 50-foot buffer or other buffer areas retained on-site when within 50 feet of a protected surface water) consistent with Part 3.3.7. The site map must show the boundary line of all such buffers.

g. Locations of on-site material, waste, borrow areas, or equipment storage areas, and other supporting activities (per Part 1.3.1.c).

h. Locations of all potential pollutant-generating activities identified in Part 6.3.8. Examples include, but are not limited to: the pollutant-generating activities listed in Part 3.5 (fueling and maintenance operations; concrete, paint, and stucco washout); waste disposal; solid waste storage and disposal; and dewatering operations (Part 3.6).

i. Locations of all WOTUS protected surface waters and any impaired or not-attaining waters or OAWs within 1/4 mile of the construction site. If none exist on-site, the SWPPP shall indicate so.

j. Stormwater outfall(s), using arrows to indicate discharge direction. Include the following:

   i. Location(s) where stormwater and/or allowable non-stormwater discharges are discharged to protected surface waters (in accordance with Part 1.3).

   ii. Location(s) of any discharges to municipal separate storm sewer systems (MS4s) from the construction site including stormwater inlets, and manmade conveyances (pipe or ditch).

k. Locations and registration numbers of all on-site drywells and drywells on adjacent properties that may receive stormwater runoff from the site, if available. If none exist, the SWPPP shall indicate so.

l. Areas where final stabilization has been accomplished and no further construction permit requirements apply (if none, the SWPPP shall indicate so).

m. Location and boundaries of buffer zones to be preserved.

6.3.6 Protected Surface Waters

The SWPPP shall identify the nearest protected surface water that may receive stormwater discharges, including ephemeral and intermittent streams, dry washes, and arroyos. If applicable, the SWPPP shall also identify and describe any wetlands near the site that could be disturbed or that could potentially receive discharges from disturbed areas of the site. Indicate if the protected surface water is a WOTUS that is listed as impaired, not-attaining or an Outstanding Arizona Water (OAW).

6.3.7 Control Measures to be used During Construction Activity

The SWPPP shall describe all control measures as required in Parts 3.3 through 3.7 that will be implemented and maintained as part of construction activities to control pollutants in discharges. For each control measure the SWPPP shall contain:

a. A description of:

   i. The appropriate control measure, including measures to minimize or eliminate non-stormwater discharges.

   ii. The general sequence during the construction process or schedule of when the control measures will be implemented.

   iii. Which operator is responsible for the implementation of control measures.

b. Standard detail drawings and/or specifications for the structural control measures, including design or installation details used on the site.

c. Specific sediment controls that will be installed and made operational prior to conducting activities in any given portion of the site to meet the requirement of Parts 3.3 through 3.7.

d. Documentation of controls for site egress points that are intended to minimize tracking of pollutants from vehicles leaving the site, consistent with Part 3.5.3.

6.3.8 Summary of Potential Pollutant Sources

The SWPPP shall identify the location and description of any pollutant sources, including any non-stormwater discharges, associated with the construction activity, from:

a. Areas other than construction (i.e., support activities including stormwater discharges).

b. Dedicated asphalt or concrete plants.

c. Other non-construction pollutant sources, such as fueling and maintenance operations, materials stored on-site, waste piles, equipment staging yards, etc.

The operator shall implement control measures in these areas to minimize pollutant discharges and shall detail these controls in the SWPPP.

If the construction site has one or more outfalls within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining, the SWPPP shall identify sources of the pollutants of concern listed on the 303(d) List of Impaired Waters that may potentially be discharged from the construction site and describe additional or enhanced control measures to minimize discharges of these pollutants.

6.3.9 Use of Treatment Chemicals

If polymers, flocculants, or other ionic exchange treatment chemicals will be used at the site, the SWPPP shall include the following:

a. A justification for the need for such chemicals and an assessment of potential water quality impacts.

b. A description of the training specific qualified personnel have or will receive on the use and storage of any ionic exchange treatment chemicals and/or chemical treatment systems at the construction site.

c. A listing of all treatment chemicals to be used at the site, a description of how the chemicals will be stored, and why the selection of these chemicals is suited to the soil characteristics of the site.

d. The dosage of all treatment chemicals that will be used at the site or the methodology that will be used to determine dosage.

e. A copy of any applicable Safety Data Sheets (SDS).

f. Schematic drawings of any chemically-enhanced controls or chemical treatment systems to be used for application of the treatment chemicals.

g. Copies of applicable manufacturer's specifications regarding the use of specific treatment chemicals and/or chemical treatment systems and references to state or local requirements affecting the use of these chemicals.

6.3.10 Pollution Prevention Procedures

a. Spill Prevention and Response Procedures. The SWPPP must describe procedures to prevent and respond to spills, leaks, and other releases consistent with Part 3.5, including:

i. Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.

ii. Preventative measures such as barriers between material storage and traffic areas, appropriately sized secondary containment provisions, and procedures for material storage and handling.

iii. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks.

iv. Procedures for notification of appropriate site qualified personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 3.5.5 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

b. SPCC: The operator may reference the existence of other plans, such as the Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an AZPDES permit for the construction activity, provided that a copy of that other plan is kept with the SWPPP on-site. If an SPCC or other spill prevention plan already exists, the operator may use such plans and incorporate them by reference in the SWPPP.

c. Waste Management Procedures:

The SWPPP must describe procedures for handling, and disposing of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

6.3.11 Procedures for Inspection, Maintenance, and Corrective Action

The SWPPP shall include a description of the procedure's operators will follow for maintaining their control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 3.2, Part 4, and Part 5 of the permit. The following information shall also be included in the SWPPP:

a. Qualified personnel responsible for conducting inspections.

b. The inspection schedule that will be followed based on whether the site is subject to Part

4.2.1, and whether the site qualifies for any of the reduced inspection frequencies in Parts 4.2.4 – 4.2.7. If conducting inspections in accordance with the inspection schedule in Part 4.2.3, document the weather information required in the inspection report.

c. If reducing the inspection frequency in accordance with Part 4.2.4 – 4.2.7, the beginning and ending dates of the reduced inspection period.

d. Any inspection or maintenance checklists or other forms that will be used.

e. The operator shall ensure that all qualified personnel (see Appendix A) review the requirements of this permit. Qualified personnel are responsible for:

i. The design, installation, maintenance, and/ or repair of control measures (including pollution prevention measures).

ii. The application and storage of treatment chemicals (if applicable).

iii. Conducting inspections as required in Part 4.

iv. Taking corrective actions as required in Part 5.

6.4 Documentation Requirements including Permit Related Records

The operator shall keep the following inspection, monitoring, and certification records complete and up-to-date. Retaining these records with the SWPPP (unless otherwise specified below) is necessary to demonstrate compliance with the conditions of this permit.

a. A copy of this permit (an electronic copy easily available to SWPPP qualified personnel is also acceptable).

b. Any correspondence exchanged between the operator and ADEQ specific to coverage under this permit.

c. A copy of the Authorization to Discharge downloaded from myDEQ.

d. Identification of any municipality that received a copy of the Authorization to Discharge.

e. Copies of any other agreements (such as a CWA section 404 permit, local grading permit, etc.) with any state, local, or federal agencies that would affect the provisions or implementation of the SWPPP, if applicable.

f. Descriptions and dates of any incidences of spills, leaks, or other releases that resulted in discharges of pollutants in stormwater to a regulated MS4 or to protected surface waters, the circumstances leading to the release and actions taken in response to the release, and measures taken to prevent the recurrence of such releases (see Part 3.5.5).

g. Documentation of repairs of structural control measures, including the date(s) of discovery of areas in need of repair/replacement, date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules (see Part 3.2). The maintenance records shall include the date(s) of regular maintenance.

h. All inspection reports (see Part 4.4).

i. Description of any corrective action taken at the site, including triggering event and dates when problems were discovered and revisions occurred.

j. If the construction site's activities are located within 50 feet of a protected surface water, the operator shall describe which buffer alternative was selected for the site, and comply with any additional documentation requirements in Part 3.3.7.c.

k. Documentation to support the operator's claim that the construction activities have changed from active to inactive and unstaffed with respect to the requirements to conduct inspections (see Part 4.2.5).

l. A Sampling and Analysis Plan – For operators required to conduct analytical monitoring (Part 7.2), a Sampling and Analysis Plan (SAP) shall be implemented and kept with the SWPPP (as part of the

SWPPP or as an appendix to the SWPPP).

m. Post-Construction Stormwater Management

i. The SWPPP shall include a description of post-construction stormwater management control measures that will be installed during the construction process to control pollutants in stormwater discharges after construction has been completed.

ii. If 'temporary' sediment basins are to be used as, or converted to retention basins in the post-construction phase, the operator shall remove and properly dispose of sediments accumulated in the basin as necessary, to meet the original capacity, or the capacity that is specified in the post-construction specifications.

iii. This permit only authorizes and requires the operator to install and maintain stormwater control measures up to and including final stabilization of the site, and does not require continued maintenance after stormwater discharges associated with the construction activity have been eliminated from the site and a Notice of Termination (NOT) has been submitted to ADEQ. However, post-construction control measures that discharge pollutants from point sources once construction is complete may require authorization under a separate AZPDES permit. See Part 1.5.1.

6.5 SWPPP Updates and Revision Requirements

Operators shall maintain records showing the dates of all SWPPP revisions. The records shall include the name of the person authorizing each change (see Part 6.1.3) and a brief summary of all changes.

6.5.1 Maintaining an Updated SWPPP: The SWPPP shall be revised as necessary during permit coverage to reflect current conditions and to maintain accuracy. The operator shall make any required amendments to the SWPPP within seven (7) calendar days whenever:

a. There is a change in design, construction, operation, or maintenance at the construction site that may have a significant effect on the discharge of pollutants to a protected surface water or MS4 that has not been previously addressed in the SWPPP.

b. During inspections, monitoring (if required), or investigations by the operator or by ADEQ or U.S. EPA it is determined that the discharges are causing or contributing to surface water quality exceedances or the SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the construction site.

c. There is a change to the stormwater team.

6.5.2 Conditions Requiring SWPPP Revisions: The operator shall modify the SWPPP, including the site map(s), within seven (7) calendar days, in response to any of the following conditions:

a. New operators become active in construction activities at the site.

b. Construction plans are changed (that will affect the quality of the discharge).

c. Control measures, pollution prevention measures, or other activities at the site are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered under Part 5.1.

d. Areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage.

e. If inspections or investigations by site staff, or by local, state, or federal officials determine that SWPPP revisions are necessary for compliance with this permit.

f. ADEQ determines it is necessary to impose additional requirements on the discharge (in accordance with Part 6.5.1), the following must be included in the SWPPP:

i. A copy of any correspondence describing such requirements.

ii. A description of the control measures that will be used to meet such requirements.

g. Revisions to applicable federal, state, tribal, or local requirements that affect the control measures implemented at the site.

h. A change in chemical treatment systems or chemically-enhanced control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

6.5.3 SWPPP Revision Records: Operators are required to maintain records showing the dates of all SWPPP revisions. The records must include the name of the person authorizing each change (see Part 6.1.3) and a brief summary of all changes.

6.5.4 Certification Requirements: All revisions made to the SWPPP consistent with Part 6.5.2 must be authorized by a person identified in Appendix B, Subsection 9.

6.5.5 Required Notice to Other Operators: When the operator determines that a revision to the SWPPP is required and there are multiple operators covered under a common SWPPP, any operators who may be impacted by the change to the SWPPP shall be notified at the address of record in the SWPPP.

6.6 Deficiencies in the SWPPP

ADEQ may notify the operator at any time that the SWPPP does not meet one or more of the requirements of this permit. The notification shall identify the parts of this permit that are not being met and parts of the SWPPP that require revision to comply with the permit. Within 14-calendar days of receipt of the notification from ADEQ (or as otherwise provided by ADEQ), the operator shall make the required changes to the SWPPP and submit the SWPPP to ADEQ in accordance with the deficiency notice.

In accordance with Appendix B, Subsection 1, ADEQ also is not precluded from taking enforcement action for any period of time the operator was operating under a SWPPP that did not meet the minimum requirements of this permit.

6.7 Posting, SWPPP Review and Making SWPPPs Available

a. The operator must post the NOI Authorization # in a conspicuous location near the main entrance of the construction site and retain a copy of the NOI in the SWPPP. For linear construction activities, the authorization number(s) must be posted near the entrance where most of the construction activity is occurring.

b. The operator must post the following statement with the Authorization #: "For stormwater complaints, please visit www.azdeq.gov." Lettering must be 2" or greater.

c. A copy of the SWPPP shall be on-site or at an easily accessible location, whenever construction or support activities are actively underway, and shall be available to ADEQ or any other federal, state or local authority having jurisdiction over the site at any reasonable time (generally Monday through Friday, 8:00 a.m. to 5:00 p.m.).

d. The SWPPP shall be made available to ADEQ or any other federal, state, tribal, or local authority having jurisdiction over stormwater discharges from the site at the time of an on-site inspection.

e. The operator shall provide a copy of the SWPPP to ADEQ upon request within seven (7) calendar days or at a time frame agreed upon with ADEQ.

f. Operators with sites that meet the requirements for inactive and unstaffed are not required to maintain the SWPPP on-site. However, the SWPPP must be locally available (i.e., in Arizona) and must be on-site when conducting the inspections required by Part 4. For the purpose of a regulatory inspection, the SWPPP shall be made available to ADEQ, U.S. EPA, or other Federal, State or local authority having stormwater program authority, within 48-hours of request. If otherwise requested by ADEQ, the operator shall submit copies of these documents within 14-calendar days of request.

7.0 STORMWATER MONITORING

The provisions of Part 7 apply to:

a. Construction sites with one or more outfalls within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining or an Outstanding Arizona Water (OAW), or as otherwise specified by ADEQ.

   Any portion of the construction site that extends within this distance is subject to the requirements of this Part, unless the operator provides a justification for not monitoring, consistent with Part 7.1. The monitoring plan, or justification, shall be included as part of the SWPPP and submitted to ADEQ for approval when the NOI is submitted in myDEQ.

b. An operator discharging to a non-WOTUS protected surface water that chooses to conduct routine analytical monitoring to demonstrate that discharges do not exceed Surface Water Quality Standards. Permittees discharging to non-WOTUS protected surface waters are subject to state requirements only, per A.R.S. 49-255.04(C), enforceable solely by ADEQ.

ADEQ may notify the operator, in writing, of additional discharge monitoring required to ensure protection of a protected surface water if it is determined that a pollutant may be causing or contributing to an exceedance of a surface water quality standard.

7.1 Monitoring Program

Operators of construction activities as described above in Part 7.0 shall prepare and implement a monitoring program that meets the requirements of this Part. Sites can be exempted from monitoring if the operator provides a demonstration acceptable to ADEQ that there is no potential for the discharge to reach the WOTUS impaired, not-attaining or OAW protected surface water.

Additionally, if the operator can demonstrate that there is no reasonable potential that construction activities will be an additional source of the specific pollutant for which the water is impaired, analytical monitoring for that parameter may not be required. As part of this demonstration, the operator must consider all on-site activities and pollutant sources, as well as any known pollutants (metals, nutrients, etc.) to be present in the on-site soils that will be disturbed. ADEQ must agree with this demonstration and make a determination in writing to the operator. Any ADEQ determinations must be kept with the SWPPP.

7.2 Sampling and Analysis Plan (SAP)

The operator shall develop a written, site-specific, SAP for analytical monitoring of stormwater discharges, unless an acceptable rationale demonstrates that stormwater monitoring is not necessary, in accordance with Part 7.1. The SAP shall be a part of the SWPPP as either an appendix or separate SWPPP section. The SAP shall include the following:

a. Locations of monitoring sites.

b. The name(s) and title of the person(s) who will perform the monitoring.

c A map showing the segments or portions of the protected surface water that are most likely to be impacted by the discharge of pollutant(s).

d. Water quality parameters/pollutants to be sampled.

e. The citation and description of the sampling protocols to be used.

f. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required. Method detection limits shall be below applicable surface water quality standards as technology allows.

7.3 Analytical Monitoring Requirements

7.3.1 When to Sample: The operator shall conduct analytical monitoring, a minimum of two (2) times per wet season, throughout the duration of permit coverage. Analytical monitoring is only required when

stormwater exits the construction site by way of an outfall in sufficient quantity to allow for sample collection and analysis.

For the purposes of analytical monitoring, wet seasons are defined as follows:

Summer wet season:	June 1 – October 31
Winter wet season:	November 1 – May 31

7.3.2 Adverse Conditions: The operator is not required to collect samples under adverse conditions, in accordance with Part 4.2.9. Information about any adverse conditions that prevented sampling shall be documented in the SWPPP.

7.3.3 Where to Sample: The operator shall conduct analytical monitoring at outfalls observed or suspected to contain the greatest pollutant load resulting from construction activities, using Table 1 below:

Table 1: Minimum Number of Samples to Collect

Number of Outfalls	Number of Samples
1 to 4	All
5 to 19	5
20 or more	25% of total

7.3.4 What to Sample:

a. OAWs: All operators of construction sites with outfalls that are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as an OAW shall monitor for turbidity, in Nephelometric Turbidity Units (NTU), both immediately upstream and downstream of each outfall. The operator shall compare turbidity values from the outfalls and if there is a 25% or more increase in the sample collected downstream of the outfall, the operator shall evaluate and replace, maintain, or install additional control measures as necessary to reduce sediment transport.

b. OAWs: the operator shall also sample for any pollutants for which the OAW is impaired.

c. Impaired or Not-attaining Waters: All operators of construction sites with outfalls that are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining waters shall sample for the pollutant(s) for which the protected surface water is impaired.

d. Lakes: All operators of construction sites with outfalls that are located within 1/4 mile upstream of a protected surface water that is a WOTUS and is listed as impaired or not-attaining lake, a site-specific proposal for sampling the impact area shall be submitted with the SAP.

7.3.5 How to Sample: The operator shall establish written procedures for sample collection, preservation, tracking, handling, and analyses. The approved SAP (in accordance with Parts 1.5.3.b) shall be a part of the SWPPP, either as an appendix or a separate section. The SAP shall include the following:

a. Sample collection, preservation, tracking, handling, and analyses:

i. Designate and train qualified personnel to collect, maintain, and handle samples in accordance with the appropriate sample protocols.

ii. Identify water quality parameters/pollutants to be sampled including any pollutant(s) of concern in accordance with this Part.

iii. Identify the required sample analyses and associated analytical method (analytical laboratory and field analyses).

b. Written procedures for:

i. Sample collection (equipment and containers, calibration procedures, document site conditions during sampling, field notes and conditions under which the sample was taken).

ii. Preservation (sample preparation to meet holding times).

iii. Tracking (including chain-of-custody procedures).

iv. Handling (packing, transporting and shipping procedures to maximize sample integrity).

c. Calibration and maintenance of equipment and monitoring methods:

All monitoring instruments and equipment (including operators' own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' recommendations. All laboratory analyses shall be conducted according to test procedures specified in 40 CFR Part 136, unless other test procedures have been specified in this general permit.

All samples collected for analytical monitoring shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Service (ADHS) Office of Laboratory Licensure and Certification. This requirement does not apply to parameters that require analysis at the time of sample collection as long as the testing methods used are approved by ADHS or ADEQ. These parameters may include flow, dissolved oxygen, pH, temperature, and total residual chlorine. The operator may conduct field analysis of turbidity if the operator has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to properly perform the field analysis.

d. Discharge Monitoring Report:

All operators subject to analytical monitoring shall submit the results on the electronic Discharge Monitoring Report (DMR) in myDEQ. The operator shall retain records of all stormwater monitoring information with the SWPPP. DMR submission in myDEQ is required as follows:

i. Within 30 days after receiving laboratory results.

In the event no samples are collected during a wet season, the DMR indicating “no data” using the appropriate No Discharge Information (NODI) Code(s) shall be submitted. If the operator was granted a sampling waiver, the DMR indicating “no data” using the appropriate No Discharge Information (NODI) code(s) shall be submitted. No Data DMR’s shall be submitted for the winter wet season on or before June 30; for the summer wet season on or before November 30.

ii. At the time the conditions in Part 2.6 have been met and a NOT is submitted in myDEQ.

8.0 RECORDKEEPING

8.1 Records

8.1.1 Address for Submittal of All Forms and Reports:

All documents required by this permit (NOIs, SWPPPs, NOTs, and DMRs) shall be submitted, in electronic format, in myDEQ.

Any other written correspondence, such as Corrective Action Forms (see Part 5.3) shall be signed and dated in accordance with Appendix B, Subsection 9 of this permit and submitted to ADEQ via email at azpdes@azdeq.gov or via U.S.P.S. at the address below:

Arizona Department of Environmental Quality

Surface Water Protection Section

1110 W. Washington Street

Phoenix, AZ 85007

8.1.2 Record Retention:

The operator shall retain records of all stormwater monitoring information, corrective actions, inspection and other reports with the SWPPP for a period of at least three (3) years from the date the NOT was submitted to ADEQ.

APPENDIX A: DEFINITIONS

24-hour Period – any consecutive 24-hours.

Anticipated Storm Event – any storm event with at least a 30% chance of precipitation as predicted by the National Weather Service for the area local to the construction site.

Arid Areas – the parts of Arizona that receive an average annual rainfall of 0 to 10 inches. To determine average annual rainfall in specific locations, see the following links: https://www.ncdc.noaa.gov/cag/national/mapping and https://www.epa.gov/enviroatlas.

AZPDES – The Arizona Pollutant Discharge Elimination System program as adopted under section 402(b) of the Clean Water Act for WOTUS; and under Section 49-255.04 for non-WOTUS protected surface waters.

Bank (e.g., stream bank or river bank) – the rising ground bordering the channel of a protected surface water, as determined by the USACE or by using USACE methodologies.

Borrow Areas – areas where materials are dug for use as fill, either on-site or off-site.

Calendar Day – means the period of 24 consecutive hours commencing at 12:01 a.m. and concluding at midnight.

Clean Water Act – establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

Commencement of Construction Activities – the initial earth-disturbance of soils or 'breaking ground' associated with clearing, grading, excavating, or stockpiling of fill material activities or other construction-related activities, such as the placement of fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals, or the occurrence of authorized non-stormwater washout activities, or dewatering activities have begun on the site.

Common Plan of Development or Sale – A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.

Construction Activity – earth-disturbing activities, such as the clearing, grading, and excavation of land, construction support activities, and other construction-related activities (e.g., grubbing; stockpiling of fill material; placement of raw materials at the site) that could lead to the generation of pollutants.

Construction Site or **Site** – the land or water area where construction activities will occur, including construction support activities, and where control measures will be installed and maintained. The construction support activities may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. Construction activities are often located on a smaller lot or parcel within the construction site.

Construction Support Activity – a construction-related activity that exclusively supports the construction site and involves activities such as clearing, grading, excavating, and stockpiling of fill materials or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas. These activities may or may not be contiguous with the construction site, but the acreage of the support area should be included in the total site acreage amount. When the term "support activities" is used without clarification, it means "construction support activities."

Construction Waste – discarded materials, such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and Styrofoam.

Control Measure – Any practice or method (including effluent limitations) used to prevent or reduce the discharge of pollutants to protected surface waters. Structural controls refer to physical controls installed on site; non-structural

controls refer to best management practices, such as good housekeeping.

Conveyance Channel – a temporary or permanent waterway designed and installed to safely convey stormwater flow within and out of a construction site.

Dewatering – the act of draining accumulated stormwater and/or ground water (e.g., from building foundations, vaults, and trenches).

Dewatering Water – as used in this permit, water discharged from dewatering activities.

Director – means the Director of the Arizona Department of Environmental Quality Division; or the Director's designee.

Discharge – When used without qualification, means the discharge of a pollutant.

Discharge of a Pollutant – any addition of any "pollutant" or combination of pollutants to protected surface waters from any "point source. This includes additions of pollutants into protected surface waters from surface runoff which is collected or channeled by man. See 40 CFR 122.2.

Discharge Point – for the purposes of this permit, the location where collected and concentrated stormwater flows or dewatering water are discharged from the construction site.

Discharge to an Impaired Water – for the purposes of this permit, a discharge to an impaired water occurs if the first WOTUS Protected Surface Water which will receive discharges is identified by a State, Tribe, or U.S. EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard. This includes discharges to impaired waters entering a Municipal Separate Storm Sewer System (MS4) prior to discharging into a waterbody.

Domestic Waste – typical household trash, garbage or rubbish items generated by construction activities.

Drought-Stricken Area – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely:

1. Drought to persist or intensify
2. Drought ongoing, some improvement
3. Drought likely to improve, impacts ease
4. Drought development likely

See http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

Earth-Disturbing Activity – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, grubbing, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

Effective Operating Condition – a control measure is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

Effluent Limitations – any of the Part 3 requirements.

Emergency-related Construction Activity – an activity initiated in response to an emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

Ephemeral water – a surface water or portion of surface water that flows or pools only in direct response to precipitation.

Erosion Control – temporary or permanent measures to prevent soil particles from detaching and being transported in stormwater.

Exposed Soils – for the purposes of this permit, soils that as a result of earth-disturbing activities are left open to the elements, such as wind and precipitation.

Hazardous Materials, Substances, or **Hazardous or Toxic Waste** – any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. Examples include paints, caulks, sealants, fluorescent lamps, PCB ballasts, solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids. See also 40 CFR 261.2.

Impaired Waters – Protected surface waters for which credible scientific data exists that satisfies the requirements of section 49-232, and that, in the case of waters of the U.S., demonstrate that the water should be identified pursuant to 33 United States Code section 1313(d) and the regulations implementing that statute.

Impervious Surface – Any surface that covers the ground (i.e., pavement) that prevents or significantly impedes the natural entry of water into the soil, preventing precipitation from soaking into the ground.

Infeasible – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices.

Intermittent Waters – a surface water or portion of surface water that flows continuously during certain times of the year and more than in direct response to precipitation, such as when it receives water from a spring, elevated groundwater table or another surface source such as melting snowpack.

Ionic Exchange Treatment Chemicals – chemicals that are used in water treatment to remove contaminants, by changing their molecular charge; used in water softening treatments and for removing heavy metals.

Linear Construction Activities – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Minimize – to reduce and/or eliminate to the extent achievable, using control measures that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or stormwater inlets) that are:

a. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges to protected surface waters.
b. Designed or used for collecting or conveying stormwater.
c. Which is not a combined sewer.
d. Which is not part of a Publicly Owned Treatment Works.

myDEQ – ADEQ's e-Permitting/e-Compliance Portal that offers the "Regulated Community" a digital solution to better assist them in meeting their environmental priorities and responsibilities with an easy online tool, available 24/7 to meet business needs.

Native Topsoil – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

Natural Buffer – for the purposes of this permit, an area of undisturbed natural cover surrounding protected surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

Natural Vegetation – vegetation that occurs spontaneously without regular management, maintenance, or species introductions or removals, and that generally has a strong component of native species.

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water. See Part 1.3.2, Allowable Non-Stormwater Discharges.

Non-Turbid – a discharge that is free from visual turbidity.

Non-WOTUS Protected Surface Water – a protected surface water that is not a WOTUS.

Not-Attaining Water – a protected surface water is assessed as impaired, but is not placed on the 303(d) List or equivalent for non-WOTUS protected surface waters because:

a. A TMDL is prepared and implemented for the protected surface water.

b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the protected surface water to attaining before the next 303(d) List submission. or

c. The impairment of the protected surface water is due to pollution for which a TMDL load allocation cannot be developed.

Notice of Intent (NOI) – the form (electronic) required for authorization of coverage under the Construction General Permit.

Notice of Termination (NOT) – the form (electronic) required for terminating coverage under the Construction General Permit.

Operational – for the purposes of this permit, stormwater controls are made "operational" when they have been installed and implemented, are functioning as designed, and are properly maintained.

Operator – with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (i.e., in most cases this is the owner of the site).
2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (i.e., they are authorized to direct workers at a site to carry out activities required by the permit; in most cases this is the general contractor of the project).

Outfall – a "*point source"* as defined by 40 CFR 122.2 at the point where construction site stormwater discharges to protected surface waters or to a Municipal Separate Storm Sewer (MS4).

Outstanding Arizona Water (OAW) – a WOTUS protected surface water that has been designated by ADEQ as an outstanding state resource under A.A.C. R18-11-112.

Perennial Water – a surface water or portion of a surface water that flows continuously throughout the year.

Permittee – for the purposes of this permit**,** a person who is given authorization to discharge stormwater from construction activities.

Person – an individual, employee, officer, managing body, trust, firm, joint stock company, consortium, public or private corporation, including a government corporation, partnership, association or state, a political subdivision of this state, a commission, the United States government or any federal facility, interstate body or other entity. [A.R.S. § 49-201(27)]

Point Source – any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged to protected surface waters. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant – sediment, fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt (e.g., overburden material), and mining, industrial, municipal and agricultural wastes or any other liquid, solid, gaseous or hazardous substances. [A.R.S. § 49-201(29)]

Pollutant-generating Activities – at construction sites, those activities that lead to the discharge of pollutants, either as a result of construction activity or construction support activity. See Construction Activities for more information.

Pollution Prevention Measures – control measures designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/ disposal practices, employee education, and other actions.

Polymers – coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

Precipitation – rain, snow, sleet or hail that falls to the ground.

Process Wastewater – any water which, during manufacturing or processing, comes into direct contact with or results from, the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Protected Surface Water – a water of the State, listed on the Protected Surface Water List pursuant to A.R.S. Section 49-221, Subsection G; and all waters of the U.S.

Qualified Person or **Qualified Personnel** – those (either the operator's employees or outside Qualified personnel) who are knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possess the skills and training to assess conditions at the construction site that could impact stormwater quality, and the skills and training to assess the effectiveness of any control measures selected to control the quality of stormwater discharges from the construction activity.

Reclaimed Water – water that has been treated or processed by a wastewater treatment plant or an on-site wastewater treatment facility. A.R.S. § 49-201(31).

Routine Maintenance – refers to any maintenance task that is done on a planned and ongoing basis to identify and prevent problems before they result in equipment failure.

Run-on – stormwater that drains from land located upslope or upstream from the regulated site in question.

Seasonally Dry Period – a month in which the long-term average total precipitation is less than or equal to 0.5 inches. See U.S. EPA's Seasonally Dry Period Locator at https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates.

Sediment Control – measures designed to intercept and settle out soil particles that have become detached and transported by water. Sediment control measures complement soil stabilization measures (erosion control).

Semi-Arid – the parts of Arizona that receive an annual rainfall of between 10 and 20 inches. See Arid Areas above.

Site – see "construction site".

Small Residential Lot – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

Spill – the release of a hazardous or toxic substance from its container or containment (see Part 3.5(5)).

Stabilization – covering or maintaining an existing cover over soil that reduces and minimizes erosion. The use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed through the construction process.

Steep Slope – where a state, tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Storm Event – a precipitation event that results in an amount of precipitation 0.25" or greater. A storm event ends when the duration of 0.25 inches of rain has stopped accumulating within a 24-hour time period.

Storm Sewer – a system of pipes (separate from sanitary sewers) that carries stormwater runoff from buildings and land surfaces.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Stormwater Discharges Associated with Construction Activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Stormwater Inlet – a structure placed below grade to conduct water; used to collect stormwater runoff for conveyance purposes.

Stormwater Pollution Prevention Plan (SWPPP) – a site-specific, written document that, among other things: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

Stormwater Team – an individual or group of individuals responsible for oversight of the development and revisions of the SWPPP, and oversight of compliance with the permit requirements. The individual(s) on the "Stormwater Team" must be identified in the SWPPP.

Support Activity – When the term "support activities" is used without clarification, it means "construction support activities."

Surface Water Quality Standards (SWQS) – Standards adopted for a non-WOTUS protected surface water pursuant to A.R.S. § 49-221 and, in the case of WOTUS, pursuant to A.R.S. § 49-222.

Temporary Stabilization – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

Thawing Conditions – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32˚F. This date can be determined by looking at historical weather data. Note: the estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

Topsoil – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

Total Maximum Daily Load (TMDL) – an estimation of the total amount of a pollutant from all sources that may be added to a protected surface water, while still allowing the protected surface water to achieve and maintain applicable surface water quality standards. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water. Total Maximum Daily Loads for Waters of the U.S. shall meet the requirements of section 303(d) of the Clean Water Act (33 USC 1313(d) and regulations implementing that statute to achieve applicable surface water quality standards.

Toxic Waste – see "Hazardous Materials"

Turbidity – a condition of water quality characterized by the presence of suspended solids and/or organic material; expressed as Nephelometric Turbidity Units (NTU). For the purposes of this permit, Visual Turbidity is present when there is a sediment plume in the discharge or the discharge appears cloudy, opaque, or has a visible contrast that can be visually identified by an observer.

Uncontaminated Discharge – in the context of authorized non-stormwater discharges, a discharge that meets applicable water quality standards.

Upstream – the term upstream (or up river) refers to the direction towards the source of the river, against the direction of flow. Likewise, the term downriver (or downstream) describes the direction towards the mouth of the river, in which the current flows.

Vegetative Buffer Strips – small areas or strips of land of permanent vegetation, designed to intercept pollutants and manage other environmental concerns. Vegetative buffers include: riparian buffers, filter strips, grassed waterways, shelterbelts, windbreaks, living snow fences, contour grass strips, cross-wind trap strips, shallow water areas for wildlife, field borders, alley cropping, herbaceous wind barriers, and vegetative barriers.

Waste Load Allocation (WLA) – the maximum load of pollutants each discharger of waste is allowed to release into a particular waterway. Discharge limits are usually required for each specific water quality criterion being, or expected to be, violated. WLAs constitute a type of water quality-based effluent limitation. (See 40 C.F.R. § 130.2(h))

Waters of the U.S. – protected surface waters that are also navigable waters as defined by Section 502(7) of the Clean Water Act.

WOTUS Protected Surface Water – a protected surface water that is a WOTUS.

Wetland – an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland includes a swamp, marsh, bog, cienega, tinaja, and similar areas. [A.A.C. R18-11-101(49)]

Work Day – a calendar day on which construction activities will take place.

Acronyms

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
A.R.S.	Arizona Revised Statute
AZPDES	Arizona Pollutant Discharge Elimination System
CFR	Code of Federal Regulations
CGP	Construction General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
MS4	Municipal Separate Storm Sewer System
NDC	No Discharge Certificate
NODI	No Discharge Information Code
NOI	Notice of Intent
NOT	Notice of Termination
NTU	Nephelometric Turbidity Units
OAW	Outstanding Arizona Water
PGP	Pesticide General Permit
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SDS	Safety Data Sheet
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
SWQS	Surface Water Quality Standard
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
WLA	Waste Load Allocation
WOTUS	Waters of the United States

APPENDIX B: STANDARD PERMIT CONDITIONS

Standard permit conditions in Appendix B are consistent with the general permit provisions required under 40 CFR 122.41 and A.A.C. R-18-9-A905(A)(3).

1. **Duty to Comply.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(a)(1) and A.R.S. §§ 49-261, 262, 263.01, and 263.02.]

a. The operator shall comply with all conditions of this permit. For discharges to a WOTUS, any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Article 9, and is grounds for enforcement action, permit termination, revocation and reissuance, or revision, or denial of a permit renewal application.

b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which an operator discharging under this permit is required to comply.

c. The operator shall comply with any effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

2. **Duty to Reapply / Continuation of the Expired General Permit.** [A.A.C. R18-9-A905, which incorporates 40 CFR 122.41(b) and A.A.C. R18-9-C903]

a. Upon reissuance of the general permit, the operator shall file an electronic Notice of Intent (NOI) through myDEQ, within the timeframe specified in the new general permit, and shall obtain new written authorization to discharge from the Director.

b. If the Director does not reissue the general permit before the expiration date, the current general permit will be administratively continued and remain in force and effect until the general permit is reissued.

c. Any operator granted authorization to discharge under the general permit before the expiration date automatically remains covered by the continued general permit until the earlier of:
   i. Reissuance or replacement of the general permit, at which time the operator shall comply with the NOI conditions of the new general permit to maintain authorization to discharge.
   ii. The date the operator has submitted an electronic Notice of Termination.
   iii. The date the Director has issued an individual permit for the discharge.
   iv. The date the Director has issued a formal permit decision not to reissue the general permit, at which time the operator shall seek coverage under an alternative general permit or an individual permit, or cease discharge.

3. **Need to Halt or Reduce Activity Not a Defense.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(c)]

It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the existing activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(d)]

The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d).

5. **Proper Operation and Maintenance.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(e)]

The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.

6. Permit Actions. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(f)]

This permit may be modified, revoked and reissued, or terminated for cause. Filing a request by the operator for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(g)]

This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of federal, state, Indian tribe, or local laws or regulations.

8. Duty to Provide Information. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(h)]

The operator shall furnish to ADEQ, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The operator shall also furnish to ADEQ upon request, copies of records required to be kept by this permit.

9. Signatory Requirements. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(k) and (l); A.A.C. R18-9-A905(A)(1)(c), which incorporates 40 CFR 122.22]

All Notices of Intent (NOI) and Notices of Termination (NOT) must be e-signed in the myDEQ online permitting system as follows:

a. NOIs:

   i. For a corporation*:* By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other operator who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

   ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.

   iii. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal (or state) agency includes: (1) The chief executive officer (or director) of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. All NOTs, reports, including SWPPPs, inspection reports, monitoring reports, and other information required by this permit must be signed by an operator described in Appendix B, Subsection 9(a) above or by a duly authorized representative of that operator. An operator is

a duly authorized representative only if:

i. The authorization is made through myDEQ by an operator described in Subsection 9(a) above.

ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the site, such as the position of manager, operator, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position).

iii. The signed and dated authorization is included in the SWPPP. A copy must be submitted to ADEQ, upon request through myDEQ.

c. Certification. Any operator signing documents under the terms of this permit shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the operator or operators who manage the system, or those operators directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

10. Inspection and Entry. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(i)]

The operator shall allow the Director or an authorized representative upon the presentation of credentials and such other documents as may be required by law to:

a. Enter upon the operator's premises where a regulated activity is located or conducted or where records must be kept under the conditions of this permit.

b. Have access to and copy at reasonable times, any records that must be kept under the conditions of this general permit.

c. Inspect at reasonable times any facility or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit.

d. Sample or monitor at reasonable times any substances or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9.

11. Monitoring and Records. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(j)]

a. Representative Samples/Measurements. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

b. Retention of Records. The operator shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date permit coverage ends. Operators shall submit any such records to the Director upon request. The operator shall retain the SWPPP developed in accordance with Part 6 of this permit, for at least three (3) years after the last revision or amendment is made to the plan. The Director may extend this retention period upon request by notifying the operator in writing at any time prior to the end of the standard three (3) year retention period.

c. Records Contents. Records of monitoring information must include:

i. The date, exact place, and time of sampling or measurements.

ii. The initials or name(s) of the individual(s) who performed the sampling or measurements.

iii. The date(s) analyses were performed.

iv. The time(s) analyses were initiated.

v. The initials or name(s) of the individual(s) who performed the analyses.

vi. References and written procedures, when available, for the analytical techniques or methods used.

vii. The analytical techniques or methods used.

viii. The results of such analyses.

d. Any operator who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Reporting Requirements. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(l)]

a. Planned changes. The operator shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted site. Notice is required only when:

i. The alteration or addition to an existing site may meet one of the criteria for determining whether a site is a new source in 40 CFR 122.29(b) (incorporated by reference at A.A.C. R18-9-A905(A)(1)(e)) [Applicable only to discharges to WOTUS].

ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at A.A.C. R18-9-A905(A)(3)(b)).

b. Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.

i. Monitoring results must be reported on a Discharge Monitoring Report (DMR) provided online by ADEQ. Pursuant to Section 7.4, all monitoring data collected pursuant to Part 7 must be submitted electronically to ADEQ using the e-Discharge Monitoring Report (e-DMR) form, available at www.azdeq.gov/mydeq.

ii. If the operator monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the e-DMR (if available), or submitted as a separate report.

iii. Calculations for all limitations which require averaging of measurements must use an arithmetic mean and non-detected results must be incorporated in calculations as the limit of quantitation for the analysis.

c. Anticipated noncompliance. The operator shall give advance notice to the Director of any planned changes in the existing facility or activity that may result in noncompliance with permit requirements.

d. Twenty-four-hour reporting.

i. The operator shall report to ADEQ any noncompliance with this permit which may endanger human health or the environment. The operator shall orally notify the office listed below within 24 hours:

ADEQ Surface Water Protection 602-771-2330

ii. A written submission shall also be provided to the office identified in Part 8, within

five (5) days of the time the operator becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

iii. The following shall be included as information which must be reported within 24 hours under this paragraph.

1) Any upset which exceeds any effluent limitation in the permit.

2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at A.A.C. R18-9-A905(A)(3)(d)).

iv. ADEQ may waive the written report on a case-by-case basis for reports under this subsection if the oral report has been received within 24 hours.

e. Other noncompliance. The operator shall report all instances of noncompliance not otherwise required to be reported under this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in subsection 12(d).

f. Other information. When the operator becomes aware that it failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to ADEQ, the operator shall promptly submit the facts or information to ADEQ via email to azpdes@azdeq.gov.

13. Reopener Clause. [A.A.C. R18-9-A905(A)(3)(d), which incorporates 40 CFR 122.44(c)]

ADEQ may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, which may be promulgated in the course of the current permit cycle.

14. Other Environmental Laws.

No condition of this general permit releases the operator from any responsibility or requirements under other environmental statutes or regulations. For example, this permit does not authorize the taking of endangered or threatened species as prohibited by Section 9 of the Endangered Species Act, 16 U.S.C. 1538. Information regarding the location of endangered and threatened species and guidance on what activities constitute a taking are available from the U.S. Fish and Wildlife Service. The operator shall also comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC).

15. State or Tribal Law. [Pursuant to A.A.C. R18-9-A904(C)]

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

16. Severability.

The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this general permit shall not be affected.

17. Requiring Coverage under an Individual Permit or an Alternative General Permit. [Pursuant to A.A.C. R18-9-C902 and R18-9-A909]

a. For discharges to a WOTUS: The Director may require an operator authorized by this permit to apply for and/or obtain either an individual AZPDES permit or an alternative AZPDES general permit. For discharges to a non-WOTUS: Discharges to non-WOTUS protected

surface waters, ADEQ may require an operator to obtain authorization under an Individual AZPDES Permit if the requirements in AR.S. 49-255.04(C) are met. Any interested operator may petition ADEQ to take action under this section. ADEQ may require an operator authorized to discharge under this permit to apply for an individual permit in any of the following cases:

i. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.

ii. Effluent limitation guidelines are promulgated for point sources covered by the general permit.

iii. An Arizona Water Quality Management Plan containing requirements applicable to the point sources is approved.

iv. Circumstances change after the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

v. If the Director determines that the discharge is a significant contributor of pollutants. When making this determination, the Director shall consider:

1) The location of the discharge with respect to protected surface waters.

2) The size of the discharge.

3) The quantity and nature of the pollutants discharged to protected surface waters.

4) Any other relevant factors.

b. If an individual permit is required, the Director shall notify the discharger in writing of the decision. The notice shall include:

i. A brief statement of the reasons for the decision.

ii. An application form.

iii. A statement setting a deadline to file the application.

iv. A statement that on the effective date of issuance or denial of the individual permit, coverage under the general permit will automatically terminate.

v. The operator's right to appeal the individual permit requirement with the Water Quality Appeals Board under A.R.S. § 49-323, the number of days the operator has to file a protest challenging the individual permit requirement, and the name and telephone number of ADEQ contact who can answer questions regarding the appeals process.

vi. The operator's right to request an informal settlement conference under A.R.S. 41-1092.03(A) and 41-1092.06.

c. The discharger shall apply for an individual permit within 90 days of receipt of the notice, unless the Director grants a later date. In no case shall the deadline be more than 180 days after the date of the notice.

d. If the discharger fails to submit the individual permit application within the time period established in Appendix B, Subsection 17(c) the applicability of the general permit to the discharger is automatically terminated at the end of the day specified by the Director for application submittal.

e. Coverage under the general permit shall continue until an individual permit is issued or denied unless the general permit coverage is terminated under Appendix B, Subsection 17(d).

18. Request for an Individual Permit. [Pursuant to A.A.C. R18-9-C902]

a. An operator may request an exclusion from coverage of a general permit by applying for an individual permit.

i. The operator shall submit an individual permit application under R18-9-B901(B) and

include the reasons supporting the request no later than 90 days after publication of the general permit.

ii. The Director shall grant the request if the reasons cited by the operator are adequate to support the request.

b. If an individual permit is issued to an operator otherwise subject to a general permit, the applicability of the general permit to the discharge is automatically terminated on the effective date of the individual permit.

19. Change of Operator. [A.A.C. R18-9-C904]If a change of ownership or operator occurs for a facility operating under a general permit:

a. Permitted owner or operator. The operator shall submit an electronic Notice of Termination (NOT) within 30 days after the new owner or operator assumes responsibility for the site.

i. The NOT shall include all requirements for termination specified in the general permit for which the NOT is submitted.

ii. An operator shall comply with the permit conditions specified in the general permit for which the NOT is submitted, until the NOT is submitted to ADEQ and the operator is issued a NOT in myDEQ.

b. New Operator.

i. The new operator shall submit a Notice of Intent (NOI) to ADEQ before taking over operational control of, or initiation of activities at, the site.

ii. If the previous permittee was required to implement a stormwater pollution prevention plan, the new owner shall develop a new stormwater pollution prevention plan, or may modify, certify, and implement the old stormwater pollution prevention plan if the old stormwater pollution prevention plan complies with the requirements of the current general permit.

iii. The operator shall submit a NOT to ADEQ in myDEQ, when:

1) The site ceases construction operations and the discharge is no longer associated with construction or construction-related activities.

2) The construction is complete and final site stabilization is achieved.

3) The operator's status changes.

20. Bypass. [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(m)]

a. Definitions.

i. Bypass means the intentional diversion of waste streams from any portion of a treatment facility

ii. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions Appendix B, Subsections 20(c) and 20(d).

c. Notice.

i. Anticipated bypass. If the operator knows in advance of the need for a bypass, if possible prior notice shall be submitted at least ten days before the date of the bypass.

ii. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Appendix B, Subsection 12(d).

d. Prohibition of bypass.

i. Bypass is prohibited, and ADEQ may take enforcement action against the operator for bypass, unless:

1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable industry judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

3) The operator submitted notices as required under Appendix B, Subsection 20(c).

ii. ADEQ may approve an anticipated bypass, after considering its adverse effects, if ADEQ determines that it will meet the three conditions listed above in this Appendix B, Subsection 20(d).

21. Upset. [A.R.S. §§ 49-255(8) and 255.01(E), A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(n)]

a. Definition: Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Appendix B, Subsection 21(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset: An operator who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An upset occurred and that the operator can identify the cause(s) of the upset.

ii. The permitted facility was at the time being properly operated.

iii. The operator submitted notice of the upset as required in Appendix B, Subsection 12(d)(iii).

iv. The operator complied with any remedial measures required under Appendix B, Subsection 4.

d. Burden of proof: In any enforcement proceeding, the operator, who is seeking to establish the occurrence of an upset, has the burden of proof.

22. Penalties for Violations of Permit Conditions.

Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, revision, or denial of a permit renewal application.

a. Civil Penalties: A.R.S. § 49-262 provides that any operator who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order

issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed $25,000 per day per violation.

b. Criminal Penalties: Any operator who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Article 9 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

APPENDIX I
Delegation of Authority Form

Delegation of Authority

I, Michael Sarabia (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the Residences at Morning Vista construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Superintendent (name of person or position)
JEM Development (company)
1795 E Skyline Drive #193 (address)
Tucson AZ 85718 (city, state, zip)
Dan (520) 990-5301 (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of ADEQ's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix I.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Michael A. Sarabia

Company: JEM Development

Title: Manager

Signature: Michael A Sarabia

Date: 10-8-25

APPENDIX J
Dust Control Permit

Air Activity Permits
33 N. Stone Avenue, Suite 700
Tucson, AZ 85701-1429
(520) 724-7400

FUGITIVE DUST ACTIVITY PERMIT

Permit Number	P25FD0227
Issuance Date	09/30/2025
Expiration Date	09/29/2026
Permittee	DSW Commercial Real Estate
Address	1795 E Skyline Dr
Project Location	Parcel: 219381450

THIS PERMIT WAS ISSUED FOR THE FOLLOWING ACTIVITIES

Landstripping/Earthmoving	2+ to 10 acres

Please read and abide by the Pima County Code air quality ordinances

webcms.pima.gov/UserFiles/Servers/Server_6/File/Government/Environmental Quality/Air/Fugitive Dust/Title_17_Dust_Ordinances.pdf

Jacqueline Ronstadt
Environmental Quality Manager

09/30/2025
Date

Pima County Code Title 17 Requirements

17.16.060 - Fugitive dust producing activities.

A. A permittee whose permit specifically allows fugitive dust producing operations or activities is responsible for controlling windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities, as applicable.

1. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant.
2. The permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate Section 17.16.050.

B. A permittee whose permit specifically allows fugitive dust producing operations or activities is responsible for controlling windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities to ensure compliance with Section 17.16.050.

17.16.050 - Visibility limiting standard.

A. No person shall cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

B. Except for sources located within the boundaries of the Tohono O'Odham, Pasqua Yaqui and San Xavier Indian Reservations, opacity of an emission from any nonpoint source, as measured in accordance with the Arizona Testing Manual, Reference Method 9, shall not exceed the following:

1. Twenty percent for such nonpoint sources in eastern Pima County, east of the eastern boundary of the Tohono O'Odham Reservation.
2. Forty percent for such nonpoint sources in all other areas of Pima County.

C. Open fires permitted according to Chapter 17.14 are exempt from the requirements of this section.

D. No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

1. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Section 17.14.040 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this subsection.
2. This subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.
3. This subsection shall not apply to the generation of airborne particulate matter from undisturbed land.

APPENDIX K
Contractor Certification Form

Contractor / Subcontractor Certifications/Agreements

CONTRACTOR / SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: GEI 20124

Project Title: Residences at Morning Vista

Operator(s): Don Phillips / NicKolas Novotny

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: JEM Development LLC

Address: 1795 E Skyline Drive #193 Tucson AZ 85718

Telephone Number (520) 297-8929

Type of construction service to be provided: clearing and grubbing, rough grading, compaction and fine grading.

Signature:

Title: Manager

Date: 9.30.25

APPENDIX L
Construction Schedule

ID	Task Name	Duration	Start	Finish	Predecessors	Successors
1	**Morning Vista**	**504 days**	**Mon 10/27/25**	**Thu 9/30/27**		
2	Notice to Proceed	1 day	Mon 10/27/25	Mon 10/27/25		4,5
3	**DEFERRED SUBMITTALS**	**40 days**	**Tue 10/28/25**	**Mon 12/22/25**		
4	Pool Submittal	40 days	Tue 10/28/25	Mon 12/22/25	2	
5	Joists/Beams Submittal	20 days	Tue 10/28/25	Mon 11/24/25	2	41,74
6	**SITE WORK**	**504 days**	**Mon 10/27/25**	**Thu 9/30/27**		
7	Clear & Grub	10 days	Mon 10/27/25	Fri 11/7/25		8
8	Import Soils	10 days	Mon 10/27/25	Fri 11/7/25	7	9
9	Grading	20 days	Fri 11/21/25	Thu 12/18/25	8	10
10	Bldg Pad Certifications	3 days	Sun 1/18/26	Wed 1/21/26	9	12
11	**UTILITIES**	**80 days**	**Thu 1/22/26**	**Wed 5/13/26**		
12	Staking for Utilities	5 days	Thu 1/22/26	Wed 1/28/26	10	13
13	Public Sewer	30 days	Thu 1/29/26	Wed 3/11/26	12	14
14	Public Water	30 days	Thu 3/12/26	Wed 4/22/26	13	16,15
15	Install pool underground	15 days	Thu 4/23/26	Wed 5/13/26	14	
16	Install Underground conduit for TEP	15 days	Thu 4/23/26	Wed 5/13/26	14	18
17	**PAVING/LANDSCAPING**	**46 days**	**Wed 5/13/26**	**Wed 7/15/26**		
18	Curbs/Driveways/Sidewalks	15 days	Thu 5/14/26	Wed 6/3/26	16	27,26FS-5 days,19
19	Install Perimeter Fence - North	10 days	Thu 6/4/26	Wed 6/17/26	18	22,23,24,20,25
20	Install Perimeter Fence - East/South	10 days	Thu 6/18/26	Wed 7/1/26	19	21
21	Install Perimeter Fence - West	10 days	Thu 7/2/26	Wed 7/15/26	20	
22	Install Rip Rap	10 days	Thu 6/18/26	Wed 7/1/26	19	
23	Install spillway	10 days	Thu 6/18/26	Wed 7/1/26	19	
24	Install Gates	10 days	Thu 6/18/26	Wed 7/1/26	19	
25	Install pool	20 days	Thu 6/18/26	Wed 7/15/26	19	
26	Landscaping	15 days	Thu 5/28/26	Wed 6/17/26	18FS-5 days	
27	Asphalt Paving	15 days	Thu 6/4/26	Wed 6/24/26	18	28,31
28	Install parking bumpers/striping	2 days	Thu 6/25/26	Fri 6/26/26	27	29
29	Building Signage	2 days	Mon 6/29/26	Tue 6/30/26	28	
30	**Units 1-9**	**324 days**	**Mon 7/6/26**	**Thu 9/30/27**		
31	Survey	1 day	Mon 7/6/26	Mon 7/6/26	27	32
32	Install concrete pad forms	15 days	Tue 7/7/26	Mon 7/27/26	31	34FS-2 days
33	Underground electrical to kitchen islan	15 days	Wed 8/12/26	Tue 9/1/26	34FS-2 days	
34	Underground Plumbing	15 days	Fri 7/24/26	Thu 8/13/26	32FS-2 days	35,33FS-2 days
35	Backfill Utility Trenches	15 days	Fri 8/14/26	Thu 9/3/26	34	36
36	Form slabs	15 days	Fri 9/4/26	Thu 9/24/26	35	37
37	Termite Pretreat	1 day	Fri 9/25/26	Fri 9/25/26	36	38FS+1 day
38	Foundation/ Slabs	20 days	Tue 9/29/26	Mon 10/26/26	37FS+1 day	40,64
39	Hercuwall Matl Delivery	1 day	Tue 10/20/26	Tue 10/20/26	40SS-5 days	
40	Hercuwall Install	30 days	Tue 10/27/26	Mon 12/7/26	38	42FS-3 days,43,39SS-5 days
41	Rough Carpentry	40 days	Tue 12/8/26	Mon 2/1/27	40,5	
42	Plumbing Rough In	20 days	Thu 12/3/26	Wed 12/30/26	40FS-3 days	43,44FS-5 days
43	Electrical Rough In	10 days	Thu 12/31/26	Wed 1/13/27	42,40	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors
44	HVAC Rough In	10 days	Thu 12/24/26	Wed 1/6/27	42FS-5 days	45FS-1 day
45	Roofing	20 days	Wed 1/6/27	Tue 2/2/27	44FS-1 day	46
46	Install insulation	5 days	Wed 2/3/27	Tue 2/9/27	45	47
47	Install windows	10 days	Wed 2/10/27	Tue 2/23/27	46	48
48	Install Drywall	30 days	Wed 2/24/27	Tue 4/6/27	47	55FS-10 days,52,53,49FS-5
49	Stucco	10 days	Wed 3/31/27	Tue 4/13/27	48FS-5 days	
50	Install Deck Railing	10 days	Wed 3/31/27	Tue 4/13/27	48FS-5 days	51FS-5 days
51	Tape & Texture	15 days	Wed 4/7/27	Tue 4/27/27	50FS-5 days	54
52	Install Doors & Hardware	5 days	Wed 4/7/27	Tue 4/13/27	48	
53	Paint - Exterior	10 days	Wed 4/7/27	Tue 4/20/27	48	
54	Paint - Interior	15 days	Wed 4/28/27	Tue 5/18/27	51	57FS-6 days
55	Install Cabinets	10 days	Wed 3/24/27	Tue 4/6/27	48FS-10 days	59FS-10 days,56
56	Install tile backsplash	7 days	Wed 4/7/27	Thu 4/15/27	55	
57	Mech/Elec Trim	12 days	Tue 5/11/27	Wed 5/26/27	54FS-6 days	60,58
58	Plumbing Trim	12 days	Thu 5/27/27	Fri 6/11/27	57	
59	Install Toilet Accessories	5 days	Wed 3/24/27	Tue 3/30/27	55FS-10 days	
60	Install Appliances	3 days	Thu 5/27/27	Mon 5/31/27	57	61
61	Building Inspection/Final	1 day	Tue 6/1/27	Tue 6/1/27	60	62
62	Punch List	1 day	Wed 6/2/27	Wed 6/2/27	61	
63	**Units 10-18**	**243 days**	**Tue 10/27/26**	**Thu 9/30/27**		
64	Survey	1 day	Tue 10/27/26	Tue 10/27/26	38	65
65	Install concrete pad forms	15 days	Wed 10/28/26	Tue 11/17/26	64	67FS-2 days
66	Underground electrical to kitchen isl	15 days	Thu 12/3/26	Wed 12/23/26	67FS-2 days	
67	Underground Plumbing	15 days	Mon 11/16/26	Fri 12/4/26	65FS-2 days	66FS-2 days,68
68	Backfill Utility Trenches	15 days	Mon 12/7/26	Fri 12/25/26	67	69
69	Form slabs	15 days	Mon 12/28/26	Fri 1/15/27	68	70
70	Termite Pretreat	1 day	Mon 1/18/27	Mon 1/18/27	69	71FS+1 day
71	Foundation/ Slabs	20 days	Wed 1/20/27	Tue 2/16/27	70FS+1 day	73
72	Hercuwall Matl Delivery	1 day	Wed 2/10/27	Wed 2/10/27	73SS-5 days	
73	Hercuwall Install	30 days	Wed 2/17/27	Tue 3/30/27	71	72SS-5 days,75FS-3 days,76
74	Rough Carpentry	40 days	Wed 3/31/27	Tue 5/25/27	73,5	
75	Plumbing Rough In	20 days	Fri 3/26/27	Thu 4/22/27	73FS-3 days	76,77FS-5 days
76	Electrical Rough In	10 days	Fri 4/23/27	Thu 5/6/27	73,75	
77	HVAC Rough In	10 days	Fri 4/16/27	Thu 4/29/27	75FS-5 days	78FS-1 day
78	Roofing	20 days	Thu 4/29/27	Wed 5/26/27	77FS-1 day	79
79	Install insulation	5 days	Thu 5/27/27	Wed 6/2/27	78	80
80	Install windows	10 days	Thu 6/3/27	Wed 6/16/27	79	81
81	Install Drywall	30 days	Thu 6/17/27	Wed 7/28/27	80	88FS-10 days,85,86,82FS-5
82	Stucco	10 days	Thu 7/22/27	Wed 8/4/27	81FS-5 days	
83	Install Deck Railing	10 days	Thu 7/22/27	Wed 8/4/27	81FS-5 days	84FS-5 days
84	Tape & Texture	15 days	Thu 7/29/27	Wed 8/18/27	83FS-5 days	87
85	Install Doors & Hardware	5 days	Thu 7/29/27	Wed 8/4/27	81	
86	Paint - Exterior	10 days	Thu 7/29/27	Wed 8/11/27	81	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors
87	Paint - Interior	15 days	Thu 8/19/27	Wed 9/8/27	84	90FS-6 days
88	Install Cabinets	10 days	Thu 7/15/27	Wed 7/28/27	81FS-10 days	92FS-10 days,89
89	Install tile backsplash	7 days	Thu 7/29/27	Fri 8/6/27	88	
90	Mech/Elec Trim	12 days	Wed 9/1/27	Thu 9/16/27	87FS-6 days	93,91
91	Plumbing Trim	10 days	Fri 9/17/27	Thu 9/30/27	90	
92	Install Toilet Accessories	5 days	Thu 7/15/27	Wed 7/21/27	88FS-10 days	
93	Install Appliances	3 days	Fri 9/17/27	Tue 9/21/27	90	94
94	Building Inspection/Final	1 day	Wed 9/22/27	Wed 9/22/27	93	95
95	Punch List	1 day	Thu 9/23/27	Thu 9/23/27	94	